

NATURAL HISTORY,
GENERAL AND PARTICULAR,

BY THE

COUNT DE BUFFON.



VOL. VI.

HISTORY OF BIRDS.

NATURAL HISTORY,

GENERAL AND PARTICULAR,

BY THE

COUNT DE BUFFON,

ILLUSTRATED WITH ABOVE SIX HUNDRED COPPER-PLATES.

THE

HISTORY OF MAN AND QUADRUPEDS

TRANSLATED, WITH NOTES AND OBSERVATIONS,

BY WILLIAM SMELLIE,

MEMBER OF THE ANTIQUARIAN AND ROYAL SOCIETIES OF EDINBURGH.

A NEW EDITION,

CAREFULLY CORRECTED AND CONSIDERABLY ENLARGED, BY MANY
ADDITIONAL ARTICLES, NOTES, AND PLATES,

AND

SOME ACCOUNT OF THE LIFE OF M. DE BUFFON,

BY WILLIAM WOOD, F. L. S.

IN TWENTY VOLUMES.

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ERRATUM.

Page 381 (note), for "disappeared" read gone.

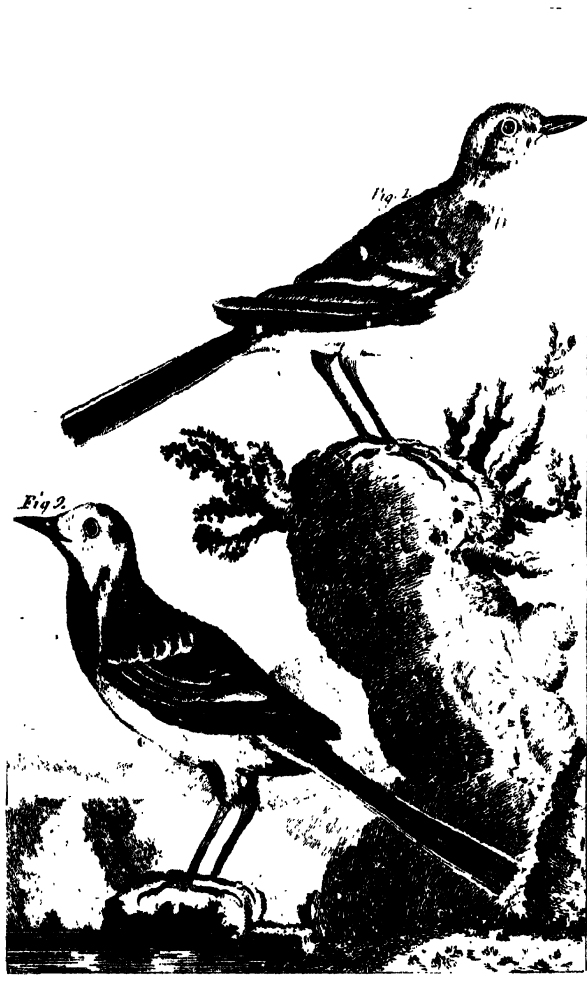


FIG. 1. THE WHITE WATER WAGTAIL. FIG. 2. THE SHEPHERDESS

NATURAL HISTORY

OF

BIRDS.

THE WAGTAILS

THE White Wagtail (*Lavandiere*) has often been confounded with the other kinds (*Bergeronnettes*): but the former commonly haunts the sides of pools, and the others frequent the meadows, and follow the flocks. All of them flutter often in the fields round the husbandman, and attend the plough to pick up the worms that crawl in the fresh-turned soil. At other seasons, the flies which molest the cattle

* MOTACILLA.

CHARACTER GENERICUS.

Rostrum subulatum, gracile, apice nonnihil emarginatum.

Lingua lacera.

Cauda elongata.

THE WAGTAILS.

and all the insects which swarm on the margin of stagnant water, are their food. The Wag-tails are real *flycatchers* if we regard only their manner of life : but they differ from these birds, because they do not watch their prey from trees, and hunt it : they only search on the ground. They form a small family of birds with a delicate bill, tall and slender legs, and a long tail, which they vibrate incessantly : and, from this habit, they have been termed *Motacilla* by the Romans, and received their various names in the provinces of France.

THE WHITE WAGTAIL*†.

BELON, and, before him, Turner, applied to this bird the Greek name *κινπολογος*, rendered into

CHARACTER SPECIFICUS.

MOTACILLA ALBA. M. pectore nigro, reatricibus duabus lateralibus dimidiato oblique albis.—*Lath. Ind. Orn.* ii. p. 501. No. 1.

MOTACILLA ALBA?—*Gmel. Syst.* i. p. 960.—*Raii Syn.* p. 75. A. 1.—*Will.* p. 171. t. 42.—*Bris.* iii. p. 461. 38.

LA LAVANDIERE.—*Buff. Pl. Enl.* 652. f. 1.—*Buff. par Sonn.* li. p. 341. pl. 144. f. 2.

WHITE WAGTAIL.—*Br. Zool.* i. No. 142. t. 55.—*Arct. Zool.* ii. p. 396. B.—*Will. (Angl.)* p. 237.—*Lath. Syn.* iv. p. 395. 1.—*Id. Sup.* p. 178.—*Bew. Birds,* i. p. 194.

HABITAT

in Europa, Asia, forte in America ad aquas; ad pagos frequens; in septentrionali Angliæ parte hyeme raro apparet, meridionalem petens. W.

† In Latin, *Motacilla*: in Italian, *Ballarina*, *Coda-tremola*, *Codin-zinzola*, *Cutretola*, *Bovarina*: in Catalanian, *Cugumela*, *Marllengu*: in Portuguese, *Avcloa*: in German, *Wysse Wasser Steltze* (white water-stilts), *Bach Steltze* (brook-stilts), *Weisse und Schwartz Bach Steltze* (white and-black brook-stilts), *Wege-Stertze* (weigh-tail), *Kloster-Stertze* (cloister-tail): in Flemish, *Quick-Stertz*: in Swedish, *Aerla*, *Saedes-Aerla*: in the dialect of Ostrobothnia, *Waestraeckia*: in Norwegian, *Erte*, *Lin-Erte*: in Danish, *Vip-Stiert*, *Havre Sær*: in Polish, *Pliska*, *Trzesiogonek Bialy*.

Latin by *culicilega* or *gnat-gatherer*; and that appellation would suit the Wagtail, though I am confident the *κνιπολογος*, was quite a different bird.

Aristotle (lib. viii. c. 3.) speaks of two woodpeckers (*δρυς καλαπίδας*)*, of the golden oriole (*κολιός*, or *galgulus*), as lodging in trees, which they strike with their bill. To these must be joined, he says, the little gnat-gatherer (*κνιπολογος*)†, which is spotted with grey, and hardly so large as the goldfinch, and with a feeble voice. Scalliger properly observes, that a *lignipeta* (*ξύλοκοπων*)‡, or pecker of trees, cannot be a Wagtail. A grey speckled plumage is different from that of the Wagtail, which is intersected with great bars, and mottled with white and black spots. Nor are the characters of size and of feeble voice applicable to the Wagtail, of which we cannot discover either the name or the description in the Greek authors; though all these properties belong to the common creeper §.

Near Montpellier it is called *Enguane-Pastre*: in Guyenne, *Peringleo*: in Saintonge, *Batajosse*: in Gascony, *Battiquoüe*: in Picardy, *Semcur*: at Nantes, and in Orleanois, *Bergeronnette*, or *Vachette*: in Lorraine, *Huche-Queue*: in Burgundy, *Crosse-Queue*, *Branle-Queue*: in Bugey, *Damette*: and in the other provinces of France, *Lavandiere*.

* From *δρυς* an oak, and *καλαπῖν* to beat.

† Perhaps from *κνιν* a gnat, and *λογω* to gather.

‡ From *ξύλον* wood, and *κοπῖν* to cut.

§ Turner himself was in the end convinced, that the *κνιπολογος* was a kind of woodpecker; and Aldrovandus thinks that Aristotle meant by that name a creeper.

The White Wagtail is scarcely larger than the ordinary titmouse, though its long tail seems to add to its size, so that its whole length is seven inches: the tail itself is three inches and a half, which the bird expands and displays while it flies. With this large oar it directs and balances its motions: it whirls, it darts, and sports in the air; and when it alights, it briskly wags it upwards and downwards, at intervals of five or six shakes.

These birds run nimbly with little hasty steps on the sandy brinks; they even venture with their long legs to the depth of a few lines in the thin sheet of water that spreads over the shelving margin: but they oftener flutter about mill-dams, and sit on stones. They visit the washerwomen, and hover about them the whole day, approaching familiarly, and picking up the crumbs that are thrown to them; and, by the jerking of their tail, seem to imitate the action of cleansing linen; from which habit they have been called in French *lavandiere* (*washer*)*.

The plumage of the White Wagtail consists of mottles and large spots of black and white: the belly is white: the tail consists of twelve quills, of which the ten middle ones are black, and the two side ones, white to near their origin: the wing reaches only the third of their

* Belon.—In England they are likewise called sometimes *dish-washers*.

length; the quills of the wings are blackish and white grey. Belon observes that, with regard to its wings, the Wagtail has some relation to the aquatic birds*. The upper side of the head is covered with a black cap, which descends to the nape of the neck; a white half-mask conceals the face, surrounds the eye, and, falling on the sides of the neck, bounds the black of the throat, which is marked with a broad horse-shoe rounded on the breast. Many subjects have only a zone or semi-circle at the top of the breast, and their throat is white; and the back, which is of a slate-grey in others, is of a brown-grey in these, which seem to form a variety†, though they are mixed and confounded with the species; for the difference between the male and female is, that in the latter

* "It has a particular mark by which it resembles the shore birds: this is, that the last feathers of the wings, joining the body, are as long as the first of the anterior ones; which obtains likewise in all other birds that live on flies and earth-worms, the plovers and the lapwings."—Belon, *Nat. des Oiseaux*, p. 349.

† "The lead-colour varies in this kind of birds, some being more cinereous, others blacker."—Willugh. Albin says the same, vol. i. p. 43. Some observers seem to attribute this difference to that of age, and assert that most of the wagtails are white on their return in spring, and assume black in the course of the season. Belon seems to be of this opinion: "The young Wagtails in their sixth month," says he, "are of another colour than those a year older, and which have cast their first plumage."

the crown of the head is brown; but in the former it is black.

The White Wagtail returns into our provinces about the end of March. It breeds on the ground under some roots, or below a grass tuft in lands not in tillage: but oftenest by the edge of waters, beneath a hollow bank, or under the stakes of wood that are driven along the sides of rivers. Their nest consists of dry herbs and small roots, sometimes intermixed with moss; the whole loosely composed, and lined with feathers or hair. They commonly have four or five white eggs, sprinkled with brown spots; and only make a single hatch; unless the first fails. The parents defend their young courageously: they flutter and dive before their enemy to draw him aside; and if he carries off the nest, they follow him, flying above his head, and constantly whirling round, calling on their young with doleful cries. They are also attentive to the cleanliness of their family, and throw out the excrements, or even remove them to a certain distance. They also disperse the bits of paper and straws which have been laid to mark their nest†. After the

* "In this species the female differs from the male in having the spot on its head, not black, but grey."—*Olina*. "The female has an ash-coloured top."—*Schwenckfeld*.

† "I observed Wagtails that built in a hole of a wall washed by the river: they were at pains to clean their nest, and carry the excrements more than thirty paces off. A piece of white paper happened to rest on the stake that prop-

young are able to fly, the parents continue to feed and train them for three weeks or a month; they gorge greedily the insects and ants' eggs that are brought to them*. These birds are always remarked to eat very quickly, without seeming to allow time for swallowing. They collect the worms on the ground; they pursue and catch the flies in the air, and these are often the objects of their whirling. Their flight is waving, and consists of jerks and springs. They assist their motion by vibrating their tail horizontally; a motion different from that on the ground, which is performed perpendicularly. The wagtails utter frequently, especially while on the wing, a small, shrill, redoubled cry, and in a clear tone, *guît-guît guigui-guît*: it is the note of rallying, for those on the ground answer it. But the cry is louder, and oftener repeated, when they have just escaped the talons of the hawk †. They are not so much

ped the wall by the water edge: this seemed offensive to the Wagtails; and I saw them, one after another, make fruitless efforts to remove it. It was too heavy, and I therefore took it away; but left in its place little strips of paper equally white. They would not suffer these to remain; but carried them to the same distance as the dung of their young, being deceived by the similarity of colour. I repeated this experiment several times."—*Note communicated by M. Hebert,*

* "I put eggs of large ants in a place where the Wagtails resorted: they took fifteen or sixteen each time, till their throat was filled, and then carried them to their young."
Note of the same observer.

† *Olin.*

afraid of men or other animals ; for when they are fired at, they do not fly far, but return and alight at a short distance from the fowler. Some are caught along with the larks, by means of the net and mirror* ; and it appears from Olina's account, that in Italy they are particularly fowled for about the middle of October.

Autumn is the time when they are most numerous in the country †. That season, which collects them together, seems to inspire them with cheerfulness ; they multiply their sports ; they hover in the air, fall in the fields, pursue and call upon each other. They come forward in numbers on the roofs of mills, and in hamlets near water, and appear to hold discourse together by their little broken and repeated cries : we might fancy that they interrogate each other, and, for a certain time, reply in their turns, till the general acclamation of the assembly marks their resolution or consent to remove to some other spot. Now it is that they have the little soft warble with a low voice, which scarcely exceeds a murmur ‡ ; and from

* This sport lasts from four in the afternoon till the dusk of the evening : the persons place themselves by the margin of water, and attract the Wagtails with a decoy bird of the same species ; or, if that cannot be had, with some other small bird.

† " In Brie, in Burgundy, in Bugey, and in most of our provinces, prodigious numbers are seen at certain times near inhabited places ; in the fields, following the flocks : whence it appears that they are birds of passage."—*Note of M. Hebert.*

‡ Belon.

this circumstance, probably, Belon has applied to them the Italian name *susuradu* (from *su-surrus*, a whisper). This gentle breathing is prompted by autumn, and by the pleasures of society, to which these birds seem much attached.

About the end of autumn, the Wagtails form into larger bodies. In the evening they descend among the willows and osiers, by sides of streams and rivers, where they call those which pass, and together make a noisy wrangling till dusk. In the clear mornings of October they fly sometimes very high, and vociferate incessantly to each other. Then is the time when they migrate into other climates*. M. de Maillet says that, in this season, prodigious numbers of them drop in Egypt, and that the people dry them in the sand to preserve them for eating†. M. Adanson mentions, that they are seen in winter at Senegal, with the swallows and quails, but only during that season.

The White Wagtail is common through the whole of Europe, as far as Sweden, and is found

* "In the north of England it appears not in winter, and rarely even in the south."—*Willughby*. "The White Wagtails depart in autumn."—*Gesner*.

† "From Cairo to the sea, all along the Nile, but chiefly near dwellings, are seen a great number of Wagtails (*bergéronettes* ou *lavandieres*) of the bluish-grey species, with a black half-collar, shaped like a horse-shoe. I could not be informed whether these birds remained the whole year in Egypt."—Note sent from Cairo by M. Sonnini.

too, as we have just noticed, in Affica and in Asia. The one which M Sonnerat brought to us from the Philippines is the same with that of Europe. That brought from the Cape of Good Hope by Commerson differed not from the variety delineated *Pl. Enl.* fig. 2, No. 652, except that the white of its throat did not rise on its head, nor so high on the sides of the neck, and that the coverts of its wings are less varied, and do not form the two transverse white lines. But is not Olinā mistaken in asserting that the White Wagtail is not seen in Italy, unless in autumn and winter? and is it likely that this bird spends the winter in that country, when it pushes its migrations so far into much hotter climates * † ?

* *Uccelleria*, p. 51.

† It is rarely seen in the northern parts of England during the winter. At that time it visits the south: yet it cannot be very impatient of cold, since, according to Pennant, it is found near the arctic circle.

W.

THE BERGERONETTES, or BERGERETTES.

THE GREY BERGERONETTE *.

First Species.

WE have seen that the *lavandiere*, or white wagtail, consists of a single species, that admits only of a slight variety; but the family of the *Bergeronettes* includes three very distinct species, and all of them live in our fields without associating or breeding together. Not to interfere with the received names, we shall

* CHARACTER SPECIFICUS,

MOTACILLA CINEREA. *M. cinerea*, subtus alba, fascia pectorali fusca, rectrice prima alba, secunda basi apiceque alba — *Lath. Ind. Orn.* ii. p. 502. No. 3.

MOTACILLA CINEREA.—*Bris.* iii, p. 465. 39. t. 25. f. 1.—*Gmel. Syst.* i. p. 961.

LA BERGERONETTE GRISE.—*Buff. Pl. Enl.* 674. 1.—*Buff. par Sonn.* li. p. 356 pl. 144. f. 3.

CINEREOUS WAGTAIL.—*Lath. Syn.* iv. p. 397. 3.

HABITAT

in Europa; alba paulo minor.—6½ pollices longa. W.

denominate them *the Grey Bergeronette*, *the Spring Bergeronette*, and *the Yellow Bergeronette*; and we shall, in a separate article, notice the foreign birds related to these.

The sort of attachment which these birds show to flocks; their habits of following them in the meadows, and of fluttering amidst cattle, while these are feeding*, and sometimes even alighting on the backs of cows and sheep; their familiarity with the herdsman, whom they attend with confidence and security, and give notice of the approach of the wolf, or of the bird of rapine: all these circumstances have procured them an appellation suited to this pastoral life†. The companion of innocent and peaceful men, the *Bergeronette* displays that attachment to our species, which would unite to us most animals, were they not repulsed by our barbarity, and the apprehension of becoming our victims. In the *little shepherdess* love predominates above fear: no bird at liberty in the fields appears so tame‡: it allows one to gain nearer and nearer it, and seems not to avoid the fowler§.

* “When these birds follow the herds, they are the spies, or rather the sentinels, of the keeper; for they give notice when they descry a wolf, or a ravenous bird.”—*Note communicated by M. Guys.*

† The word *Bergeronette*, or *Bergerette*, signifies a little shepherdess.

‡ Belon.

§ Salerne.

It feeds on flies during the summer months ; but after the frosts have destroyed the winged insects, and confined the cattle to their stalls, they retire to the brooks, and there pass almost the whole of the severe season. At least, the most of them continue with us during the winter : the yellow *Bergeronette* is more uniformly stationary : the grey is less common in that season.

All the *Bergeronettes* are smaller than the white wagtail, and their tail is proportionally longer. Belon was well acquainted only with the yellow one, and appears to indicate the Grey *Bergeronette* by the appellation of *another kind of lavandiere*.

The upper side of the Grey *Bergeronette* is grey, or cinereous : the under side of its body white, with a brown bar, or half collar, on the neck : the tail is blackish, with white on the outer quills : the great quills of the wings are brown ; the others blackish, and fringed with white, like the coverts.

They build about the end of April, commonly on a willow near the ground, and sheltered from rains. They breed twice a year. The second hatch is late ; for their nests are found even in September ; which could never happen to a family of birds that migrate, and are obliged to educate their young before the winter. However, those of the first hatch, and the pairs which have more diligently dis-

charged their office, spread through the fields in the months of July and August; whereas the white wagtails seldom flock, except when they migrate about the end of September and in October*.

The *Bergeronette*, which is constitutionally the friend of man, will not become his slave, and it dies in the cage. It loves society, and cannot bear close confinement; but, if left loose in a room during winter, it will survive, and will catch flies, and pick up the crumbs of bread†. Sometimes it alights on board ships, becomes familiar with the sailors, continues with them in the voyage, and never leaves them till their arrival at the port‡. But such facts may perhaps be ascribed to the white wagtail, which roams more than the *Bergeronette*, and which, in passing the seas, is apt to lose its way§.

* Belon.

† Gesner and Schwenckfeld.

‡ On the 8th of June we were off the coasts of Sicily, twelve or fifteen leagues from land. We caught on the vessel a *Bergeronette*: we set it at liberty, but it still continued with us. Food and drink were set for it on one of the windows, to which it regularly came for its meal. It faithfully accompanied us till we were close on the isle of Candia: it quitted us when we had entered the port of Sonda."—*Note communicated by M. de Manoncour.*

§ Paullin, in the *Collect. Acad.* t. 4, p. 175, speaks of a *Bergeronette* which he observed on the sea shore. It took some water into its beak, and endeavoured to introduce it into its anus, as the ibis is said to do on the banks of the

Nile. This attempt was repeated several times. Our observer returned the next day to the same place, and found the bird dead. Upon examination, he found a large transparent pustule near the rump, filled with a foetid liquor. It was as large as a pea, and entirely closed the rectum. The bird's object was probably to pierce this pustule, and soften it with the water.

W.

THE SPRING BERGERONETTE

Second Species.

THIS *Bergeronette* is the first that is seen in the meadows and fields, where it nesties among the green corn. Scarcely indeed does it disappear in the winter, unless during the most severe colds: it commonly haunts, like the yellow kind, the sides of brooks, and springs which never freeze. The epithets bestowed on

CHARACTER SPECIFICUS.

MOTACILLA FLAVA. M. pectore abdomineque flavis, rectricibus duabus lateralibus dimidiato oblique albis.—*Lath. Ind. Orn.* ii. p. 504. No. 8.

MOTACILLA FLAVA.—*Gmel. Syst.* i. p. 963.—*Raii Syn.* p. 75. A. 2.—*Will.* p. 172. t. 68.

MOTACILLA VERNA.—*Bris.* iii. p. 468. 40.

LA BERGERONETTE DE PRINTEMPS.—*Buff. Pl. Enl.* 674. 2. *Buff. par Sonn.* li. p. 363. pl. 145. f. 1.

YELLOW WAGTAIL †.—*Br. Zool.* i. No. 143.—*Arct. Zool.* ii. p. 396. F.—*Will. (Angl.)* p. 238. t. 68.—*Edw.* t. 258.—*Lath. Syn.* iv. p. 400. 6.—*Id. Sup.* p. 179.—*Bew. Birds,* i. p. 198.

HABITAT

in Europæ, Asiæ pratis; gregaria, nec aquatica. W.

† In German, *Bach-Steltze* (brook-stilts), *Gelbrustige* (yellow-breast), *Irlin*, *Gelber Sticherling*, *Gelbe - Weyer - Bach Steltze* (yellow-weighing-brook-stilts).

these birds seem improper; for the following species has less yellow than the present. That colour is distinct only on the rump and belly; but, in the Spring *Bergeronette* all the upper and fore parts of the body are of a fine yellow; and there is a streak of the same on the wing, at the fringe of the middle coverts. All the mantle is of a dull olive, which also borders the eight quills of the tail, whose ground-colour is blackish: the two outer ones are more than half white: those of the wings are brown, with their outer edge whitish; and the third of those nearest the body reaches, when the wing is closed, as far as the longest of the great quills; a character which we have already noticed in the white wagtail. The head is cinereous; the crown tinged with olive: above the eye there is a line, which is white in the female, and yellow in the male; which is distinguished also by blackish streaks, more or less frequent, forming a crescent under the throat, and also sprinkled above the knees. When the male is in season, he runs and turns round his female, bristling up the feathers on his back in an odd sort of way, but which undoubtedly expresses the fire of his passion. Their hatch is sometimes late, but commonly productive. They breed often under the banks of rivulets, and sometimes in the midst of corn before harvest*. They frequent, in autumn,

* Willughby.—Edwards.

the herds of cattle, like the other *Bergeronettes*. The species is common in England, in France*, and seems to be spread through the whole of Europe, as far as Sweden††. We have found; in several subjects, the hind nail to be longer than the great fore toe; an observation which Edwards and Willughby had made before, and which contradicts the axiom of the nomenclators, who assume it as a generic character of these birds, that this nail and this toe are equal§.

* Edwards.

† Linnæus.

‡ It is found also in the woods and moist places in the island of Madeira: its eggs are lead-coloured, variegated with yellowish spots. W

§ Brisson.

THE YELLOW BERGERONETTE*.

Third Species.

WHEN the white wagtails depart in autumn, the *Bergeronettes* come near our dwellings, says Gesner, and appear even in the midst of the villages. This habit belongs especially to

CHARACTER SPECIFICUS.

MOTACILLA BOARULA. M. cinerea, subtus flava, rectrice prima tota, secunda latere interiore, alba.—*Lath. Ind. Orn.* ii. p. 502. No. 4.

MOTACILLA BOARULA.—*Gmel. Syst.* i. p. 997.

———— CINEREA an FLAVA ALTERA ALDR.—*Raii Syn.* p. 75. 3.—*Will.* p. 172. 3.

MOTACILLA FLAVA.—*Briss.* iii. p. 471. 41. t. 23. f. 3. (*mas.*)

LA BERGERONETTE JAUNE.—*Buff. Pl. Enl.* 28. 1. (*mas.*)
—*Buff. par Sonn.* li. p. 374. pl. 145. f. 2.

YELLOW WAGTAIL.—*Alb.* ii. t. 58. (*fem.*)

GREY WAGTAIL †.—*Edw.* t. 259.—*Br. Zool.* i. No. 144.
—*Will. (Angl.)* p. 238.—*Lath. Syn.* iv. p. 398. 4.—*Id. Sup.* p. 178.—*Bew. Birds,* i. p. 196.

HABITAT

in Europa.—7½ pollices longa.—In Anglia fluvios lapidosos frequentat, nidificans in borealibus; tempore hyberno australiores petens.

W.

† In Italian, *Coda-tremola Gialla*; in German, *Kleine Bach Steltze* (little brook-stilts): in Polish, *Pliska-Zolta*.

the yellow kind*: it then procures its subsistence beside the margins of perennial springs, and shelters itself beneath the shelving banks of rivulets. It finds its situation so comfortable, that it even warbles in that torpid season, unless the cold be excessive. This is a soft whispered song, like the autumnal notes of the white wagtail, and very different from the shrill cry which it utters in rising into the air. In the spring, it removes to breed in the meadows, or sometimes in the copses beneath a root, and near running water: the nest is placed on the ground, and built with dry herbs and moss, well lined with feathers, hair, or wool, and closer interwoven than that of the white wagtail. It contains six, seven, or eight eggs, of a dirty white, spotted with yellowish. After the young are raised, and the meadows are mowed, the parents lead them among the herds of cattle.

Flies and gnats are then their food; for, when they haunt the sides of streams in winter, they subsist on worms, and also swallow little seeds. We found these with fragments of caterpillars, and a small stone, in the gizzard of a Yellow *Bergeronette*, caught in the end of December. The *œsophagus* was dilated before its insertion: the gizzard was muscular, and lined with a dry wrinkled membrane, which had no adhesion: the intestinal tube was ten

* Gesner.—Aldrovandus.—Qlina.

inches long, and without any *cæcum*, or gall bladder; the tongue was fringed at the end: as in all the *Bergeronettes*, the hind nail was the longest.

Of all the long-tailed birds, the Yellow *Bergeronette* is most remarkable for that character*: its tail is near four inches, and its body is only three and a half; its alar extent is eight inches ten lines; its head is grey; its mantle, as far as the rump, deep olive, on a grey ground; its rump yellow; the under side of its tail of a brighter yellow; its belly and breast of a pale yellow in young subjects, such as those which Brisson seems to have described; but in adults they are of a rich brilliant yellow†: the throat is white: a small longitudinal whitish bar rises at the bill, and passes over the eye: the plumage of the wings is of a brown-grey, slightly fringed in some places with a white-grey: there is some white at the origin of the middle quills, which forms a transverse bar on the wing, when this is spread; also, the exterior edge of the three nearest the body is pale yellow, and of these three the first is almost as long as the largest quill: the outermost of those of the tail is entirely white, except a black hollow on the inside: the next is white only within, and the third the same: the

* Edwards.

† Edwards.—“There is a distinction in the *Bergeronette* between the male and the female; the male being very yellow under the belly, no bird more so.”—*Belon*.

six others are blackish, Those which have on the throat a black spot, bearing a white bar under the cheek, are the males*. According to Belon, their yellow tint is also much more vivid: the line of the eyebrows is equally yellow: and it is remarked that the colour of all these birds is more intense in winter after moulting.

Edwards describes this bird under the name of the *grey water wagtail*†; and Gesner applies the epithets of *shake-tail*, *beat-ley*, which are equivalent to *lavandiere* (*washer-woman*). In fact, these *Bergeronettes* frequent, no less often than the white wagtail, the brinks of water and pebbly brooks‡; and, since they lodge in such situations during the winter, their haunts are even more constant. However, the greater part of them migrate; for they are more numerous among the cattle in autumn, than beside the springs and rivulets in winter§. Lin-

* Willughby describes only the female, and calls it the *grey wagtail*: and Albin, who gives two figures of this bird, only delineates the female twice; for neither of them has black on its throat.

† *Gleanings*. An inaccurate denomination, which originated with Willughby, who owns that he described only the female.

‡ Willughby.

§ “In the month of August such numbers are caught, that hundreds are brought to town, although at other seasons they are rare, and cannot be got.”—*Belon*. Adanson found the Yellow Bergeronette in Senegal. “In this isle (Gorée) are many small water-birds, woodcocks of several kinds,

næus and Frisch take no notice of this species; whether because they confound it with the spring bergeronette, or because only one of these occurs in the north of Europe*.

The *Java Bergeronette* † of Brisson resembles much this third species. The differences are slight, or even vanish in comparing the descriptions; and we shall not hesitate to class them together.

larks, thrushes, sea-partridges, and common wagtails, which are the ortolans of the country; being little pellets of fat, excellently flavoured."—*Voyage to Senegal*, p. 169.

* It is frequent in England; breeds in the northern part of the island, and shifts in winter to the south.

† CHARACTER SPECIFICUS.

MOTACILLA BOARULA. *M. fusco-olivacea*, subtus flava, collo inferiore et pectore griseis, rectrice prima tota, secunda et tertia latere interiore apiceque albis.—*Lath. Ind. Orn.* ii. p. 503. No. 4. Var. β .

MOTACILLA JAVENSIS.—*Bris.* iii. p. 474. 42. t. 25. f. 2.

LA BERGERONETTE de JAVA.—*Buff. par Sonn.* li. p. 380.

JAVAN WAGTAIL.—*Lath. Syn.* iv. p. 399. 4. A.

HABITAT

in Java insula.—7 pollices longus.

W,

FOREIGN BIRDS

WHICH ARE RELATED TO THE BERGERONETTES.

I.

THE BERGERONETTE from the
CAPE of GOOD HOPE*.

THE foreign bergonettes resemble so closely those of Europe, that we might readily suppose them to be derived from the same stock, and only modified by the influence of climate. The one from the Cape of Good Hope was brought by Sonnerat, and is the same which Brisson describes. A great brown mantle, which terminates in black on the tail, and its

CHARACTER SPECIFICUS.

MOTACILLA CAPENSIS. M. fusca, subtus albida, fascia pectorali fusca, superciliis albis, cauda nigra, rectricibus lateralibus oblique albis.—*Lath. Ind. Orn.* ii. p. 505. No. 10.

MOTACILLA CAPENSIS.—*Gmel. Syst.* i. p. 979.—*Bris.* iii. p. 476. 45. t. 25. f. 3.

LA BERGERONETTE du CAP DE B. ESPERANCE.—*Buff.* **Pl. Ent.* 28. f. 2.—*Buff. par Sonn.* li. p. 382.

CAPE WAGTAIL.—*Lath. Syn.* iv. p. 402. 8.

HABITAT

ad Caput B. Spei.

W.

two edges, joined below the tail by a brown scarf, covers all the upper side of the body, which is as large as that of the white wagtail. All the under side of the body is dirty white; a small line of the same colour intersects the brown hood on the head, and passes from the bill to the eye. Of the quills of the tail the eight middle ones are entirely black: the exterior on each side are broad scalloped with white: the wing appears brown when closed; but, on spreading it, the half of its length is white.

II,

THE LITTLE BERGERONETTE from the CAPE of GOOD HOPE*.

There are two characters which oblige us to separate this bird from the preceding. 1. The

CHARACTER SPECIFICUS.

MOTACILLA AFRA. *M. flavescens - fusca, subtus flava, crisso albo, superciliis alis caudaque nigris.*—*Lath. Ind. Orn.* ii. p. 505. No. 11.

MOTACILLA AFRA.—*Gmel. Syst.* i. p. 962.

LA PETITE BERGERONETTE du CAP DE B. ESPERANCE.
—*Buff. par Sonn.* li. p. 384.

AFRICAN WAGTAIL.—*Lath. Syn.* iv. p. 402. 9.

HABITAT

cum præcedente, qua paulo minor.

W.

size; this one being only five inches, of which the tail occupies two and a half. 2. The colour of the belly, which is entirely yellow, except the inferior coverts, which are white: a small black bar passes over the eye, and stretches beyond it: all the mantle is of a yellowish-brown: the bill is broad at its base, and grows thinner at the middle, and more inflated at the tip: it is black, as are also the wings and the legs: the toes are very long; and Sonnerat, who brought it, observes that the hind nail is larger than the rest: he observes too, that this species resembles much the following, which he has also communicated, and which is perhaps the same, varied only by the difference of climate between the Cape and the Moluccas.

III.

THE BERGERONETTE of the ISLAND of TIMOR*.

As in the preceding, its body is yellow: there is a streak of the same colour on the eye:

CHARACTER SPECIFICUS.

MOTACILLA FLAVA. M. cinereo-grisea, subtus flava, superciliis flavis, remigibus rectricibusque nigris, fasciæ alarum alba.—*Lath. Ind. Orn.* ii. p. 504. No. 8. Var β.

the upper side of its head and body is cinereous-grey: the great coverts are tipped with white, and form a bar of the same colour on the wing, which is black, as well as the tail and the bill: the legs are pale red: the hind nail is twice as long as the rest: the bill, as in the preceding, is at first broad, then thin, and afterwards swelled: the tail is twenty-seven lines, and exceeds the wings eighteen lines; and the bird shakes it continually, like the European wagtails.

LA BERGERONETTE de l'ISLE de TIMOR.—*Buff. par. Sonn.* li. p. 386.

TIMOR WAGTAIL.—*Lath. Syn.* iv. p. 401. G. A.

HABITAT

in insula Timor Indiæ orientalis.

W.

IV.

THE BERGERONETTE from MADRAS*.

Ray first noticed this species, and from him Brisson has drawn his description; but neither

* CHARACTER SPECIFICUS.

MOTACILLA MADERASPATENSIS. *M. nigra*, ventre albo, fascia alarum longitudinali alba, *rectricibus duabus intermediis nigris, lateralibus albis*.—*Lath. Ind. Orn.* ii. p. 502. No. 2,

of them mentions the size. Its colours consist of black and white: the head, the throat, the neck, and all the back, including the wings, are black: all the quills of the tail are white, except the two middle ones; these are black, and rather shorter than the rest, which makes the tail forked: the belly is white: the bill, the legs, and nails, are black. Every part that is black in the male, is grey in the female.

MOTACILLA MADERASPATENSIS.—*Gmel. Syst.* i. p. 961.

———— MADERASPATANA.—*Bris.* iii. p. 478. 44.—

Raii Syn. p. 194. 3. t. 1. f. 1. (*mas.*)—*Id.* No. 4. t. 1. f. 6. (*fem.*)

PIED WAGTAIL.—*Lath. Syn.* iv. p. 397. 2.

HABITAT

circa Maderaspatum.

W.

THE FIG-EATERS

THESE birds are of a genus approaching to that of the fig-peckers, and resemble these in their principal characters. Their bill is straight, slender, and very acute, with two small scallops near the extremity of the upper mandible; a property which they have in common with the tanagres, in which however the bill is much thicker and shorter. The nostrils of the fig-eaters are uncovered, which distinguishes them from the titmice: the angle of their hind nail is arched, which separates them from the larks; and therefore they must be ranged by themselves.

We are acquainted with five species of fig-eaters in the hot countries of the old continent, and twenty-nine in those of America: these differ from the former in the shape of the tail, which is regularly tapered in the species that inhabit the old continent, but notched at the end in the natives of America, and almost forked, the two middle quills being shorter than the others; and that character is sufficient to decide to what continent they belong. We shall begin with those of the old.



FIG.1. THE FIG-EATER. FIG.2. THE PITPA'

THE GREEN - AND - YELLOW FIG-EATER *.

First Species.

THIS bird is four inches and eight lines in length; its bill seven lines, its tail twenty lines, and its legs seven lines and a half. The head and all the upper side of the body are of an olive-green; the under side of the body yellowish: the superior coverts of the wings are of a deep brown, with two transverse white bars: the quills of the wings and

* CHARACTER SPECIFICUS.

SYLVIA ZEYLONICA. *S. viridis*, subtus flavescens, nucha alisque nigris, fascia alarum bifida alba. — *Lath. Ind. Orn.* ii. p. 532. No. 91.

MOTACILLA TIPHIA. — *Gmel. Syst.* i. p. 963.

———— ZEYLONICA. — *Gmel. Syst.* i. p. 964.

FICEDULA BENGALENSIS. — *Bris.* iii. p. 48⁴ 47.

LE FIGUIERE VERT et JAUNE. — *Buff. par Sonn.* li. p. 397.

CEYLON WARBLER. — *Brown. Ill.* p. 36. — *Lath. Syn.* iv. p. 434. 87. — *Id. Sup.* p. 474.

GREEN INDIAN FLYCATCHER. — *Edw.* i. 70. (*sem.*) i. 132 (*resp.*)

GREEN INDIAN WARBLER. — *Lath. Syn.* iv. p. 474. 89.

HABITAT

in Zeylona, Bengala. — $4\frac{1}{2}$ pollices longa.

W.

32 THE GREEN-AND-YELLOW FIG-EATER.

those of the tail are of the same green with the back: the bill, the legs, and the nails, are blackish.

Edwards describes this bird as brought from Bengal, and terms it a *flycatcher*, though its bill indicates a quite different genus. Linnæus is also mistaken in reckoning it a wagtail (*motacilla*); for the tails of the fig-eaters are much shorter.

THE CHERIC*.

Second Species.

IN the island of Madagascar this bird is known by the name *tcheric*: it was transported into the Isle of France,* where it is called *white-eye*, on account of a small white membrane encircling its eyes. It is smaller than the preceding, being only three inches and eight lines in length, and its other dimensions proportional: its head, the upper side of its neck, its back, and the superior coverts of its wings, are of an olive-green: its throat and the inferior coverts of its tail are yellow; the upper side of its body is whitish: the quills of the wings are

* CHARACTER SPECIFICUS.

SYLVIA MADAGASCARIENSIS. S. virescens, subtus albida, gula anoque flavis, palpebris albis.—*Lath. Ind. Orn.* ii. p. 533. No. 94.

MOTACILLA MADERASPATANA.—*Linn. Syst.* i. p. 334. 28.

————— MADAGASCARIENSIS.—*Gmel. Syst.* i. p. 981.

FICEDULA MADAGASCARIENSIS MINOR.—*Bris.* iii. p. 498. 54. t. 28. f. 2.

LE CHERIC.—*Buff. par Sonn.* hi. p. 5.

WHITE-EYED WARBLER.—*Lath. Syn.* iv. p. 475. 91.

HABITAT

in Madagascar; vix.— $3\frac{1}{2}$ pollices longa; gregaria. W.

of a light brown, and bordered with olive-green on their outer margin; the two quills in the middle of the tail are of the same olive-green with the upper side of the body: the other quills of the tail are brown, and edged with olive-green: the bill is dun-grey: the legs and nails are cinereous. The Viscount Querhoënt, who observed this bird in the Isle of France, says that it is not timid, yet seldom visits the settlements; that it flies in flocks, and feeds on insects.

THE LITTLE SIMON

Third Species.

THIS bird is called the *Little Simon* in the island of Bourbon, though it is not a native of that place, and must have been transported thither : for we are informed by people of veracity, and particularly by Commerson, that there existed no kind of quadrupeds or birds in the islands of Bourbon and France when the Portuguese first discovered them. These islands appear to be the points of a continent which has been swallowed up, and almost all their whole surface is covered with volcanic productions ; so that at present they are stocked only with animals that have been carried to them.

* CHARACTER SPECIFICUS.

SYLVIA BORBONICA. S. griseo-fusca, subtus griseo-flavescens, remigibus rectricibusque griseo marginatis.—*Lath. Ind. Orn.* ii. p. 533. No. 95.

FICEDULA BORBONICA.—*Bris.* iii. p. 510. 60. t. 28. f. 3.

LE FIGUIER de l'ISLE de BOURBON.—*Pl. Enl.* 705. f. 2.

LE PETIT SIMON.—*Buff. par Sonn.* lii. p. 7. pl. 146. f. 3.

BORBON WARBLER.—*Lath. Syn.* iv. p. 475. 92.

HABITAT

in Madagascaria et Borbonica insula.

W.

This bird is exactly of the same size with the preceding: the upper side of its body is of a light slate-colour; the under side white grey; the throat white; the great quills of the tail deep brown, edged on one side with a slate-colour; the bill is brown, acute, and slender; the legs grey, and the eyes black; the females, and even the young ones, have nearly the same plumage as the males. They are very numerous in every part of the island of Bourbon, where the Viscount Querhoënt observed them. They usually breed in September, and lay three or four eggs, probably several times in the course of the year. They build on single trees, and even in orchards: the nest is formed of dry herbs, and lined with hair: the eggs are blue. These birds will allow a person to get very near them: they fly always in flocks, and feed on insects and small soft fruits. When they see a partridge running along the ground, a hare, or a cat, &c. they flutter round it, making a peculiar cry; and hence they direct the fowler to his prey.

THE BLUE FIG-EATER*.

Fourth Species.

THIS species has not been noticed by any naturalist, and is probably a native of Madagascar. The male seems to differ in nothing from the female, except that its tail is a slight degree longer, and the upper side of its body has a tinge of blue mixed with the whitish. The head and all the upper side of the body are of a blueish cinereous; the quills of the wings and of the tail are blackish, edged with white: the bill and legs are bluish.

* CHARACTER SPECIFICUS.

SYLVIA LIVIDA. S. griseo-cærulescens, crisso albido, remigibus caudaque nigris, rectricibus duabus exterioribus albis.—*Lath. Ind. Orn.* ii. p. 534. No. 97.

MOTACILLA LIVIDA.—*Gmel. Syst.* i. p. 981.

LE FIGUIER BLEU de MADAGASCAR.—*Pl. Enl.* 705. f. 3.

MADAGASCAR WARBLER.—*Lath. Syn.* iv. p. 476. 94.

HABITAT

n Madagascaria.

W.

THE SENEGAL FIG-EATER.

Fifth Species.

WE conceive that the three birds delineated No, 582, *Pl. Enl.* are the same species; of which the spotted fig-eater is the male, and the two others only varieties arising from age or sex. They are all very small, but figure 1 is the least *.

The spotted fig-eater †, No. 2, is scarcely four inches long, of which the tail occupies two: it is tapered, and the two middle quills are the longest: all the tail quills are brown, fringed with rusty white; so are also the great quills of the wings. The plumage of the wings, and of the back and head, is black, edged with light rufous: the rump is deeper rufous, and the fore part of the body is white.

The two others differ from this, but resemble each other. The fig-eater (figure 3) ‡ has

* *Sylvia Rufigastra*.—*Lath.*

† *Motacilla Undata*.—*Gmel.*

Sylvia Undata.—*Lath. Ind.*

The Undated Warbler.—*Lath. Syn.*

‡ *Motacilla Flavescens*.—*Gmel.*

Sylvia Flavescens.—*Lath. Ind.*

The Citron-bellied Warbler.—*Lath. Syn.*

not its tail tapered : it is light brown, and proportionally shorter than the body : the upper side of the head and body is brown : the wing is blackish brown, fringed on the quills, and undated on the coverts with a rusty brown : the fore part of the body is of a light yellow, and there is a little white under the eyes.

The fig-eater (figure 1) is smaller than the other two : all its plumage is nearly the same as that of figure 3, except the fore part of the body, which is not light yellow, but aurora red.

We have already seen that, in some species of the genus of fig-eaters, there are some individuals whose colours vary considerably.

We presume likewise, that the three other birds of No. 584, *Pl. Enl.* are of the same identical species ; of which the first appears to be the male *, and the two others varieties of age or sex † ; the third, particularly, seems to be a female. In all the three, the head and upper side of the body are brown ; the under side grey, with a flaxen tint of various extent and intensity : the bill is brown, and the legs yellow.

* *Motacilla Fuscata*.—*Gmel.*

Sylvia Fuscata.—*Lath. Ind.*

The Dusky Warbler.—*Lath. Syn.*

† *Motacilla Subflava*.—*Gmel.*

Sylvia Subflava.—*Lath. Ind.*

The Flaxen Warbler.—*Lath. Syn.*

We shall now proceed to enumerate the species of fig-eaters that are found in America. They are in general larger than those of the ancient continent. We have already noticed their distinguishing character, and we can only subjoin some details with regard to their habits. They are of a wandering disposition; they pass the summer in Carolina, or even so far north as Canada, and return to the warmer regions to breed and raise their young. They inhabit the cleared grounds and the cultivated spots: they perch on small shrubs, and feed on insects and ripe tender fruits; such as those of the bananas, of the mangroves, and of the fig-trees, which are not natives of that climate, but were transported thither; they enter the gardens to peck them, and hence their name: however, they on the whole eat more insects than fruits; for, if these are hard, they cannot break them.

THE SPOTTED FIG-EATER*.

First Species.

THIS bird is seen in Canada during summer, but makes only a short stay, and does not breed there: its ordinary residence is in Guiana, and other parts of South America. Its warble is pleasant, and much like that of the linnet.

The head and all the upper side of its body are of a fine yellow, with reddish spots on the lower part of the neck, and on the breast and sides: the upper surface of its body, and the superior coverts of its wings, are of an olive-green: the quills of its wings are brown, and

* CHARACTER SPECIFICUS.

SYLVIA ÆSTIVA. S. viridi-olivacea, subtus flava, collo subtus pectoreque maculis rubescentibus, rectricibus lateralibus intus luteis.—*Lath. Ind. Orn.* ii. p. 551. No. 157.

MOTACILLA ÆSTIVA.—*Gmel. Syst.* i. p. 996. •

FICEDULA CANADENSIS.—*Bris.* iii. p. 492. 51. t. 26. f. 3.

LE FIGUIER TACHETE'.—*Buff. Pl. Enl.* 58. f. 2.—*Buff. par Sonn.* lii. p. 17.

YELLOW-POLL WARBLER.—*Arct. Zool.* ii. No. 292.—*Lath. Syn.* iv. p. 515.—*Id. Sup.* p. 183.

HABITAT

ⁱn Guiana; æstate in Canadæ sylvis inter saliceta.—4½ pol-
lices longa. W.

edged exteriorly with the same green: the quills of the tail are brown, and bordered with yellow: the bill, the legs, and the nails, are blackish.

A variety of this species, or perhaps the female, is represented in the same plate; for it differs from the other only because the upper side of the head is, like the body, of an olive-green: but these differences are insufficient to form a separate species."

THE RED-HEADED FIG-EATER*.

Second Species.

THE crown of the head is of a beautiful red : all the upper side of the body is olive-green ; the under side of a fine yellow, with red spots on the breast and belly : the wings and tail are brown : the bill is black, and the legs are reddish. The female has no difference from the male, except that its colours are not so bright. It is a solitary transient bird : it arrives in Pennsylvania in the month of March, but does not breed there : it frequents the brakes, seldom perches on large trees, and it feeds on the insects which it finds on the shrubs.

SYLVIA PETECHIA. *S. olivacea, subtus flava rubro guttata, pileo rubro.*—*Lath. Ind. Orn.* ii. p. 535. No. 103.

MOTACILLA PETECHIA.—*Gmel. Syst.* i. p. 983.

FICEDULA ERYTHROCEPHALOS.—*Bris.* iii. p. 488. 49.

LE FIGUIER à TÊTE ROUGE.—*Buff. par Sonn.* lii. p. 535. No. 103.

YELLOW REDPOLL.—*Edw.* t. 256.

RED-HEADED WARBLER.—*Arct. Zool.* ii. No. 289.—*Lath. Syn.* iv. p. 479. 39.

HABITAT

in Pennsylvania.

W.

THE WHITE-THROATED FIG-EATER*.

Third Species.

THIS bird is found in St. Domingo. In the male, all the upper surface of the body, and the small superior coverts of the wings, are of an olive-green: the sides of the head and throat are whitish: the lower part of the neck and breast is yellowish, with small red spots: the rest of the upper side of the body is yellow: the great superior coverts, and the quills of the wings, and those of the tail, are brown, and edged with olive-yellow: the bill, the legs, and nails, are brown-grey.

The female differs not from the male, except that the green on the upper part of the neck is mixed with cinereous.

* CHARACTER SPECIFICUS.

SYLVIA ALBICOLLIS. *S. viridi-olivacea, subtus albo-flavicans strigis rufescentibus, reatricibus lateralibus intus dimidiato sulphureis.*—*Lath. Ind. Orn.* ii. p. 535. No. 104.

MOTACILLA ALBICOLLIS.—*Gmel. Syst.* i. p. 983.

FICEDULA DOMINICENSIS.—*Bris.* iii. p. 494. 52. t. 26. f. 5.

LE FIGUIER à GORGE BLANCHE.—*Buff. par Sonn.* lii. p. 21.

ST. DOMINGO WARBLER.—*Lath. Syn.* iv. p. 479. 100.

HABITAT

in *Dominicensi insula.*—5 fere pollices longa.

W.

THE YELLOW-THROATED FIG-EATER*.

Fourth Species.

THIS bird is a native of Louisiana and of Saint Domingo. In the male, the head and all the upper side of the body are of a fine olive-green, which is slightly tinged with yellowish on the back: the sides of the head are of a dilute cinereous: the throat, the lower part of the neck, and the breast, are of a fine yellow, with small reddish spots on the breast: the rest of the under side of the body is of a yellowish-white: the superior coverts of the

* CHARACTER SPECIFICUS.

SYLVIA LUDOVICIANA. S. viridi - olivacea, subtus alba luteo varia, collo subtus flavo, fascia alarum duplici alba, rectricibus duabus, exterioribus apice intus albis.—*Lath. Ind. Orn.* ii. p. 535. No. 105.

MOTACILLA LUDOVICIANA.—*Gmel. Syst.* i. p. 983.

FICEDULA LUDOVICIANA.—*Bris.* iii. p. 500. 55. t. 26. f. 4,

LE FIGUIER à GORGE JAUNE.—*Buff. par Sonn.* lii. p. 23.

LOUISIANE WARBLER.—*Arct. Zool.* ii, No. 303.—*Lath. Syn.* iv. p. 480. 101.

HABITAT

in Louisiana et insula S. Dominici.—4½ pollices longa. W.

wings are blueish, and terminated with white, which forms two cross white bars on each: the quills of the wings are of a blackish brown, and edged exteriorly with blueish-oinereous, and white within: the first three quills on each side have also a white spot on the extremity of their inside: the upper mandible is brown: the lower grey; the legs and nails ash-coloured.

The plumage of the female is the same with that of the male, only there are no red spots on the breast.

We cannot help observing that Brisson has confounded this bird with the *pine-creeper* of Edwards, which is indeed a fig-eater, but different from the present. We shall notice it afterwards.

THE GREEN-AND-WHITE FIG-EATER*.

Fifth Species.

THIS is also a native of Saint Domingo. The head and the under side of the neck are of a yellowish-ash colour in the male; the small superior coverts of the wings, and all the upper side of the body, olive-green; the throat and all the under side of the body yellowish-white; the great superior coverts of the wings and the quills brown; and edged with yellowish-green; the quills of the tail of an ex-

* CHARACTER SPECIFICUS.

SYLVIA CHLOROLEUCA. S. viridi-olivacea, subtus flavicans, capite colloque superius cinereis, rectricibus lateralibus intus dimidiato-luteis.—*Lath. Ind. Orn.* ii. p. 536. No. 106.

MOTACILLA CHLOROLEUCA.—*Gmel. Syst.* i. p. 984.

FICEDULA DOMINICENSIS MINOR.—*Bris.* iii. p. 496. 53. t. 26. f. 2.

LE FIGUIER VERT et BLANC.—*Buff. par Sonn.* lii. p. 25

GREEN-AND-WHITE WARBLER.—*Latb. Syn.* iv. p. 439. 102.

HABITAT

in Dominicensi insula.— $4\frac{1}{2}$ pollices longa.

W.

48 THE GREEN-AND-WHITE FIG-EATER.

ceedingly deep olive green: the lateral ones have, on their inside, a yellow spot, that is broader the more they are exterior: the bill, the legs, and nails, are brown-grey.

In the female the colours are fainter, which is the only difference.

THE ORANGE-THROATED FIG-EATER*.

Sixth Species.

BRISSEAU terms this the *Canada Fig-eater*; but, probably, like the rest of the genus, it is only a bird of passage in that climate. The head, the upper side of the neck, the back, and the small superior coverts of the wings, are of an olive-green; the rump, and the great superior coverts of the wings, cinereous; the throat, the lower part of the neck, and the breast, orange; the belly, pale yellow;

* CHARACTER SPECIFICUS.

SYLVIA AURICOLLIS. S. olivacea, subtus flava, collo subtus pectoreque flavo-aurantiis, crisso rectricibusque lateralibus intus albis.—*Lath. Ind. Orn.* ii. p. 536. No. 107.

MOTACILLA AURICOLLIS.—*Gmel. Syst.* i. p. 984.

FICEDULA CANADENSIS MAJOR.—*Bris.* iii. p. 508. 59. t. 26. f. 1.

LE FIGUIER à GORGE ORANGE'E.—*Buff. par Sonn.* lii. p. 27.

ORANGE-THROATED WARBLER.—*Arct. Zool.* ii. No. 304. —*Lath. Syn.* iv. p. 481. 103.

HABITAT

in Canada; ultra 5 pollices longa,

W.

50 THE ORANGE-THROATED FIG-EATER.

the lower belly and, the legs, whitish; the quills of the wings brown, and edged exteriorly with cinereous: the two middle quills of the tail are cinereous: all the rest are white within, and blackish on the outside, and at the tip.

There is no difference in the plumage between the male and the female, except that the colours in the latter are less vivid.

THE CINEREOUS-HEADED FIG-EATER *.

Seventh Species.

THIS bird was sent from Pennsylvania to England, and Edwards calls it the *Yellow-rumped Flycatcher*; he has very improperly given the appellation of *Flycatcher* to all the Fig-eaters that he has described and delineated. In the present, the crown and sides of the head are cinereous: the upper surface of the neck and the back are of an olive-green, spotted with black: the throat, the breast, and

* CHARACTER SPECIFICUS.

SYLVIA MACULOSA. S. nigro maculata, supra viridi-olivacea, subtus uropygioque lutea, capite cinereo, fascia alarum duplici rectricibusque lateralibus medio intus albis.—*Lath. Ind. Orn.* ii. p. 536. No. 108.

MOTACILLA MACULOSA.—*Gmel. Syst.* i. p. 984.

FICEDULA PENNSYLVANICA NÆVIA.—*Bris.* iii. p. 502. 56.

LE FIGUIER à TÊTE CENDRÉE.—*Buff. par Sonn.* lii. p. 29.

YELLOW-RUMPED FLYCATCHER.—*Edw.* t. 255.

YELLOW-RUMPED WARBLER.—*Arct. Zool.* ii. No. 288.
•—*Lath. Syn.* iv. p. 481. 104.—*Id. Sup.* p. 182.

HABITAT

in Pennsylvania; magnitudine Hippolaidis.—5 pollices longa.
W.

52 THE CINEREOUS-HEADED FIG-EATER.

the rump, are of a fine, yellow, with black spots on the breast: the superior coverts of the wings are of a deep ash colour, and terminated with white, which forms two transverse white bars on each wing: the quills of the wing are deep cinereous, edged with white: the two middle quills of the tail are black; the others are blackish, with a great white spot on the inside: the bill, the legs, and the nails, are brown.

THE BROWN FIG-EATER*.

Eighth Species.

SIR HANS SLOANE is the first who mentions this bird, which he found in the cultivated parts of Jamaica, and which he calls *Worm-eater*. The head, the throat, all the upper side of the body, the wings, and the tail, are light brown: the under side of the body is variegated with the same colours as the plumage of the larks. This is all that author says on the subject.

* CHARACTER SPECIFICUS.

SYLVIA FUSCESCENS. *S. fuscescens*, subtus rufo griseoque varia, fascia per oculos juguloque saturate fuscis.—*Lath. Ind. Orn.* ii. p. 537. No. 109.

MOTACILLA FUSCESCENS.—*Gmel. Syst.* i. p. 984.

FICEDULA JAMAICENSIS.—*Bris.* iii. p. 512. 61.

LE FIGUIER BRUN.—*Buff. par Sonn.* lii. p. 31.

MUSCICAPA PALLIDE FUSCA (Worm-eater).—*Raii Syn.* p. 186. 38.—*Sloan. Jam.* p. 310. 45. p. 265. f. 2.

BROWN-THROATED WARBLER.—*Lath. Syn.* iv. p. 482. 106.

HABITAT

Jamaica.—5 pollices longa.

W.

THE BLACK - CHEEKED FIG-EATER *.

Ninth Species.

WE are indebted to Edwards for the account of this bird. It inhabits Pennsylvania, and frequents the small woods that are watered by rills, at the sides of which it is commonly found. It only spends the summer in that climate, and disappears before the winter; which shows that this Fig-eater, like the others, is only a bird of passage in those parts of North America.

The sides of its head are of a fine black, and

* CHARACTER SPECIFICUS.

SYLVIA TRICHAS. *S. olivacea*, corpore subtus flavo, fascia oculari nigra.—*Lath. Ind. Orn.* ii. p. 519. No. 36.

TURDUS TRICHAS.—*Gmel. Syst.* i. p. 811.

FICEDULA MARYLANDICA.—*Bris.* iii. p. 506. 58.

LE FIGUIER AUX JOUES NOIRES.—*Buff. par Sonn.* lii. p. 33.

MARYLAND YELLOW-THROAT.—*Edw.* t. 237.

YELLOW-BREASTED WARBLER.—*Arct. Zool.* ii. No. 283.
—*Lath. Syn.* iv. p. 438. 32.

HABITAT

in America septentrionali.—5 pollices longa.

W.

the crown is reddish-brown : the upper side of the neck, the back, the rump, and the wings, are of a deep olive-green ; the throat and breast of a fine yellow ; the rest of the under side of the body pale yellow : the bill and legs are brown.

THE YELLOW-SPOTTED FIG-EATER*.

Tenth Species.

WE borrow the description of this bird also from Edwards. Both the male and female were caught at sea eight or ten leagues off Saint Domingo, in the month of November, and brought to England by the same ship. The author observes properly that these are migratory birds, and were then on their passage from North America to the island of Saint Domingo.

The head and all the upper side of the body

CHARACTER SPECIFICUS.

SYLVIA TIGRINA. *S. fusco et olivaceo-viridi varia, subtus flava, collo subtus pectoreque nigro maculato, pone oculos macula rufa, fascia alarum alba.*—*Lath. Ind. Orn.* ii. p. 537. No. 110.

MOTACILLA TIGRINA.—*Gmel. Syst.* i. p. 985.

FICEDULA CANADENSIS FUSCA.—*Bris.* iii. p. 515. 63. t. 27. f. 4.

LE FIGUIER TACHETE' DE JAUNE.—*Buff. par Sonn.* lii. p. 35.

SPOTTED YELLOW FLYCATCHER.—*Arct. Zool.* ii. No. 402. —*Edw.* t. 257.—*Lath. Syn.* iv. p. 482, 106.

HABITAT

in Canada.— $4\frac{1}{2}$ pollices longa.

W.

is olive: above the eyes there is a yellow bar; the throat, the lower part of the neck, the breast, and the inferior coverts of the wings, of a fine yellow, with little black spots: the belly and the legs are of a pale yellow, without spots; the wings and tail of a dull olive-green: there is a long white spot on the superior coverts of the wings; and the lateral quills of the tail are white one half of their length.

The female does not differ from the male, except that the breast is whitish, with brown spots; and that the olive-green of the upper surface of the body is not so glossy. Brisson has taken the female for another species, which he has termed *the brown Fig-eater of Saint Domingo*.

THE BROWN-AND-YELLOW FIG-EATER *.

Eleventh Species.

THIS bird is found in Jamaica. Sloane and Brown have both described it, and Edwards has given a coloured figure under the name of *Yellow Wren*, which is improper. Catesby and Klein have fallen into another mistake, reckoning it a titmouse. It breeds in Carolina, but does not continue there during the winter: the head, all the upper surface of the body, the wings, and the tail, are of a greenish-brown: there are two small bars on each side of the

* CHARACTER SPECIFICUS.

SYLVIA TROCHILUS.—*Lath. Ind. Orn.* ii. p. 550. Var. β .

MOTACILLA ACREDULA.—*Linn. Syst.* i. p. 338. 49.

FICEDULA CAROLINENSIS.—*Bris.* iii. p. 486. 48.—*Id.*

8vo. i. p. 443.—*Klein Av.* p. 86. 11.

ŒNANTHE FUSCO-LETEA MINOR.—*Raii Syn.* p. 186. 39.

Sloan. Jam. ii. p. 310. 46.

LE FIGUIER BRUN ET JAUNE.—*Buff. par Sonn.* lii. p. 38.

YELLOW TITMOUSE.—*Cat. Car.* i. t. 63.

——— *WREN*.—*Edw.* t. 278. f. 2.

SCOTCH WREN.—*Br. Zool.* i. No. 152.—*Arct. Zool.* ii.

p. 420. N.—*Id. Sup.* p. 64.—*Lath. Syn.* iv. p. 513.

HABITAT

in Europa, America; frequens in Angliâ.

W.

head : all the under surface[†] of the body is of a fine yellow : the superior coverts of the wings are terminated with green and light olive, which forms two oblique bars in each : the quills of the wings are edged exteriorly with yellow : the bill and legs are black *.

* This bird, which seems to be only a variety of the yellow wren, breeds in North Carolina, and retires in winter to Jamaica. It occurs also in most parts of Europe, from India to Kamtschatka.

THE PINE FIG-EATER

Twelfth Species.

EDWARDS calls this bird the *Pine-creeper*; but it does not belong to that genus, though it creeps on the pines in Carolina and Pennsylvania. The bill of the creepers, it is well known, is bent like a sickle; whereas it is straight in this bird, which resembles the Fig-eaters so much in every other respect, that it ought to be classed with them. Catesby is also mistaken in ranging it with the titmice, probably because, like these, it creeps on trees. Brisson has committed an oversight in separating the *Pine-creeper* of Catesby from that of Edwards.

* CHARACTER SPECIFICUS.

SYLVIA PINUS. S. olivacea, subtus flava, loris nigris, alis cæruleis fasciis duabus albis.—*Lath. Ind. Orn.* ii. p. 537.

No. 111.

CERTHIA PINUS.—*Gmel. Syst.* i. p. 479.

PARUS AMERICANUS.—*Bris.* iii. p. 576. 15.

LE FIGUIER DES SAPINS.—*Buff. par Sonn.* lii. p. 40.

PINE CREEPER.—*Cat. Car.* i. t. 46.—*Edw.* t. 277.

PINE WARBLER.—*Arct. Zool.* ii. No. 313.—*Lath. Syn* iv p. 483. 107.

HABITAT

estate in Carolina.— $4\frac{1}{2}$ pollices longa.

W.

The head, the throat, and all the under side of the body, are of a very beautiful yellow; there is a small black bar on each side of the head: the upper part of the neck, and all the upper surface of the body, are of a yellow-green or shining olive, which is still more bright on the rump: the wings and tail are of a blueish-iron colour: the superior coverts are terminated with white, which forms on each wing two transverse white bars: the bill is black, and the legs are of a yellowish-brown.

The female is entirely brown.

This bird appears in Carolina in winter, where Catesby tells us that it searches on the fallen trees for insects. It is also seen during summer in the northern provinces. Bartram informed Edwards, in a letter, that it arrives in Pennsylvania in the month of April, and continues all the summer: however, he confesses that he never saw its nest. It lives on the insects that lodge on the leaves, and in the buds of trees.

THE BLACK-COLLARED FIG-EATER*.

Thirteenth Species.

THIS Fig-eater was sent from Pennsylvania by Bartram to Edwards: it is a bird of passage in that climate, where it arrives in April, and advances northwards, and in September it returns again to the south. It feeds on insects, like all the others of this genus.

The crown of the head, all the upper surface of the body, and the small superior coverts of the wings, are of an olive-green: the sides of the head and neck are of a fine yellow; the

* CHARACTER SPECIFICUS.

SYLVIA VIRENS. *S. viridi-olivacea, subtus alba, genis lateribus colli pectoreque flavis, collo subtus nigro, fascia alarum duplici alba.*—*Lath. Ind. Orn.* ii. p. 537. No. 112.

MOTACILLA VIRENS.—*Gmel. Syst.* i. p. 985.

FICEDULA PENNSYLVANICA GUTTURE NIGRO.—*Bris. Sup.* p. 104.

LE FIGUIER à CRAVATE NOIRE.—*Ruff. par Sonn.* lii p. 43.

BLACK-THROATED GREEN FLYCATCHER.—*Edw.* t. 300.

GREEN WARBLER. *Arct. Zool.* ii. No. 297.—*Lath. Syn.* iv. p. 484. 108.

HABITAT

in Pennsylvania.

W.

throat, and under surface of the neck, black ; which forms a sort of collar of that colour ; the breast is yellowish ; the rest of the under side of the body white, with some blackish spots on the flanks ; the great superior coverts of the wings are of a deep brown, and terminated with white, which forms on each wing two white transverse bars : the quills of the wings, and those of the tail, are of a deep ash-colour : the three outer ones on each side of the tail are marked with white spots within : the bill is black, and the legs brown.

THE YELLOW-HEADED FIG-EATER*.

Fourteenth Species.

BRISSEAU is the first who described this bird. He tells us that it is found in Canada; but it is probably only migratory in that northern climate, like some other species of Fig-eaters. The crown of its head is yellow: there is a great black spot on each side of the head, over the eyes, and another whitish one below them; the back of the head, the upper side of the neck, and all the upper side of the body, covered with black feathers, edged with yellowish-

* CHARACTER SPECIFICUS.

SYLVIA ICTEROCEPHALA. S. grisea, subtus albida, pileo luteo, fascia oculari nigra duabusque alaribus flavis.—

Lath. Ind. Orn. ii. p. 538. No. 113.

MOTACILLA ICTEROCEPHALA.—*Gmel. Syst.* i. p. 990.

FICEDULA CANADENSIS ICTEROCEPHALOS.—*Briss.* iii. p. 517. 64. t. 27. f. 2.

LE FIGUIER à TÊTE JAUNE.—*Buff. par Sonn.* lii. p. 45.

LE FIGUIER de MISSISSIPPI.—*Pl. Enl.* 731. f. 2.

QUEBEC WARBLER.—*Arct. Zool.* ii. No. 305.—*Lath. Syn.* iv. p. 481 109.

HABITAT

in Canada.—4½ pollices longa.

W.

green; the throat, and all the under side of the body, whitish; the superior coverts of the wings black, and tipped with yellowish, which forms on each wing two cross yellowish bars: the quills of the wings and of the tail are blackish, and edged exteriorly with olive-green and whitish; the inside of the three lateral quills of the tail yellowish-white, from their middle to their extremity: the bill, the legs, and nails, are blackish.

It appears that the bird, No. 731, Fig. 2, *Pl. Enl.* denominated the *Mississippi Fig-eater*, is only a variety of the present, occasioned by age or sex; for the only difference is, that it has no spots on the sides of its head, and that its colours are not so deep.

THE YELLOW - THROATED CINEREOUS FIG-EATER*.

Fifteenth Species.

DR. SLOANE gives the account of this bird, which is found in Jamaica and Saint Domingo. The head, the whole of the upper surface of the body, and the small superior coverts of the wings, are of an ash-colour: on each side of the head there is a yellow longitudinal bar; below the eyes a large black spot; on the outer edge of each eye a white spot: the throat, the under side of the neck, the breast, and belly,

* CHARACTER SPECIFICUS.

SYLVIA DOMINICA. *S. cinerea*, subtus alba, macula ante oculos lutea, pone alba, infra nigra.—*Lath. Ind. Orn.* ii. p. 538. No. 114.

MOTACILLA DOMINICA.—*Gmel. Syst.* i. p. 980.

FICEDULA DOMINICENSIS CINEREA.—*Bris.* iii. p. 520. 65. t. 27. f. 3.

LE FIGUIER CENDRE' à GORGE JAUNE.—*Buff. par Sonn.* lii. p. 47.

MUSCICAPA à CÆRULEO, CINEREO, FUSCO, et LUTEO VARIA.—*Raii Syn.* p. 186. 27.—*Sloan. Jam.* ii. p. 310. 44.

JAMAICA WARBLER.—*Lath. Syn.* iv. p. 485. 110.

HABITAT

in Jamaica.— $4\frac{1}{2}$ pollices longa.

W.

are yellow, with some small black spots on each side of the breast: the great superior coverts of the wings are brown, edged exteriorly with cinereous, and tipped with white, which forms two transverse white bars on each wing: the quills of the wings and of the tail are of an ash-brown, and edged exteriorly with grey: the two outer quills on each side of the tail are marked with a white spot near the end of their interior surface: the bill, the legs, and the nails, are brown.

THE COLLARED CINEREOUS FIG-EATER *.

Sixteenth Species.

WE are indebted to Catesby for the account of this bird, which he terms the *Finch-creeper*; but it belongs to neither of these genera, and is really a Fig-eater. It is found in North America, from Carolina to Canada.

The head, the upper side of the neck, the rump, and the superior coverts of the wings, are of an ash-colour: the back is olive-green; the throat and breast yellow, with a half-collar of cinereous on the lower part of the neck: the rest of the under side of the body is white, with some small red spots on the flanks: the great superior coverts of the wings are tipped

* CHARACTER SPECIFICUS.

SYLVIA AMERICANA. *S. cinereo-cærulescens*, interscapularibus olivaceo-flavis, jugulo pectoreque flavis, abdomine fasciaque alarum albis.—*Lath. Ind. Orn.* ii. p. 520. No. 40.

MOTACILLA AMERICANA.—*Gmel. Syst.* i. p. 960.

LE FIGUIER CENDRE' à COLIER.—*Buff. Pl. Enl.* 731. f. 1.—*Buff. par Sonn.* lii. p. 49.

YELLOW-BACKED WARBLER.—*Lath. Syn.* iv. p. 440. 36.

HABITAT

in America.

W.

THE COLLARED CINEREOUS FIG-EATER. 69

with white, which forms on each wing two transverse white bars: the quills of the wings and of the tail are blackish: the two exterior feathers, on each side of the tail, have a white spot at the termination of their inner surface: the upper mandible of the bill is brown; the lower mandible and the legs, yellowish.

, These birds creep on the trunks of large trees, and feed on the insects which they pick out of the cracks in the bark: they continue during the whole winter in Carolina.

THE BELTED FIG-EATER*.

Seventeenth Species.

ON the crown of the head there is a yellow spot, and on each side, a white bar: the rest of the head, the upper surface of the body, the superior coverts of the wings, are of a deep cinereous, almost black. But the most obvious character is a yellow belt between the breast and belly, which are both white, variegated with some small brown spots: the great superior coverts of the wings are tipped with white, which forms two white transverse bars on each wing: the superior coverts of the tail

* CHARACTER SPECIFICUS.

SYLVIA CINCTA. *S. cinerascens*, subtus alba, vertice fasciæque abdominali lutea, pectore fusco maculato,—

Lath. Ind. Orn. ii. p. 539. No. 116.

MOTACILLA CANADENSIS.—*Linn. Syst.* i. p. 334. 27.

————— CINCTA.—*Gmel. Syst.* i. p. 980.

FICEDULA CANADENSIS CINEREA.—*Bris.* iii. p. 524. 67.
t. 27. f. 1.

LE FIGUIER à CEINTURE.—*Buff. par Sonn.* lii. p. 51.

BELTED WARBLER.—*Arct. Zool.* ii. No. 306.—*Lath. Syn.* iv. p. 487. 112.

HABITAT

in Canada.—6 pollices longa.

W.

are yellow: the quills of the wings and of the tail are brown: the two exterior quills, on each side of the tail, have a white spot near the termination of the inner surface: the bill is black; the legs and nails brown.

The female differs not from the male, except that the upper surface of the body is brown, and the superior coverts of the tail are not yellow.

THE BLUE FIG-EATER

Eighteenth Species.

THIS is the *blue flycatcher* of Edwards. It was caught at sea eight or ten leagues south of Saint Domingo; but from his statement, he seems to have received another of the same birds from Pennsylvania. They arrive in that province about May, and remain through the summer; and thus they are migratory in North America, as are almost all the other Fig-eaters, whose native climate is South America.

The head, all the upper part of the body, and

* CHARACTER SPECIFICUS.

SYLVIA CANADENSIS. S. supra cærulea, subtus alba, jugulo remigibus rectricibusque nigris.—*Lath. Ind. Orn.* ii. p. 539. No. 117.

MOTACILLA CANADENSIS.—*Gmel. Syst.* i. p. 991.

FICEDULA CANADENSIS CINEREA MAJOR.—*Bris.* iii. p. 527. 68. t. 27. cf. 6.

LE FIGUIER CENDRE' du CANADA.—*Pl. Enl.* 685. f. 2.

LE FIGUIER BLEU.—*Buff. par Sonn.* lii. p. 53.

BLUE FLYCATCHER.—*Edw.* t. 252.

BLACK-THROATED WARBLER.—*Arct. Zool.* ii. No. 285. —*Lath. Syn.* iv. p. 487. 113.

HABITAT

in Pennsylvania.—4½ pollices longa.

W.

the superior coverts of the wings, are of a blue slate colour: the throat, and the sides of the head and neck, are of a fine black; the rest of the under surface of the body whitish: the quills of the wings, and of the tail, blackish, with a white spot on the great quills of the wings: the bill and legs are black: in the *Planches Enluménées* these are yellow: perhaps the small scales of the dried specimen from which it was designed, were worn off.

THE VARIEGATED FIG-EATER*.

Nineteenth Species.

SLOANE found this bird in Jamaica, and Edwards received a specimen from Pennsylvania, where it appears in the month of April. It feeds on insects, and continues during the summer; but, on the approach of winter, it returns to the tropical parts of the American continent. The crown of its head is white; the sides black, with two small white bars: the back and rump are white, variegated

* CHARACTER SPECIFICUS.

SYLVIA VARIA. S. albo nigroque maculata, fasciis alarum duabus albis, cauda bifida.—*Lath. Ind. Orn.* ii. p. 539. No. 118.

MOTACILLA VARIA.—*Gmel. Syst.* i. p. 979.

FICEDULA DOMINICENSIS VARIA.—*Bris.* iii. p. 529. 60. t. 27. f. 5.

LE FIGUIER VARIE' —*Buff. par Sonn.* lii. p. 55.

MUSCICAPA è FUSCO et ALBO VARIA.—*Raii Syn.* p. 186. 36.—*Sloan. Jam.* p. 309. 42. t. 265. f. 1.

BLACK-AND-WHITE CREEPER.—*Edw.* t. 300.

WHITE-POLL WARBLER.—*Arct. Zool.* ii. No. 293.—*Lath. Syn.* iv. p. 488. 114.

HABITAT

in Pennsylvania, Jamaica; migratoria.—4½ pollices longa. W.

with large black spots: the throat is black; the breast and belly white, with some black spots on the breast and sides: the great superior coverts of the wings are black, tipped with white, which forms two transverse white bars on each wing: the quills of the wings are grey, and edged with white on the inside: the quills of the tail are black, and edged with iron-grey; the lateral ones have white spots on their inside: the bill and legs are black.

THE RUFOUS-HEADED FIG-EATER*.

Twentieth Species.

THIS bird was sent from Martinico to M. Aubry, rector of Saint 'Louis. The head is rufous; the upper part of the neck, and all the upper side of the body, olive-green; the throat and breast yellow, variegated with longitudinal rufous spots; the rest of the under side of the body, light yellow without spots: the superior coverts and the quills of the wings and of the tail are brown, edged with olive-green; the two exterior quills on each side of the tail are light yellow on the inside; the bill brown, and the legs grey.

* CHARACTER SPECIFICUS.

SYLVIA RUFICAPILLA. S. viridi-olivacea, subtus flava, collo subtus pectoreque strigis fuscis, vertice rufo, rectricibus duabus exterioribus intus lutescentibus.—*Lath. Ind. Orn.* ii. p. 540. No. 119.

MOTACILLA RUFICAPILLA.—*Gmel. Syst.* i. p. 971.

FICEDULA MARTINICANA.—*Bris.* iii. p. 490. 50. t. 22. f. 4.

LE FIGUIER à TÊTE ROUSSE.—*Buff. par Sonn.* lii. p. 57.

BLOODY-SIDE WARBLER.—*Lath. Syn.* iv. p. 489. 115.

HABITAT-

in insula Martinica.—4½ pollices longa.

W.

We conceive that the bird mentioned by Father Feuillée under the appellation of *chloris erithacorides*, is the same with this. Its bill is black, according to that author, and pointed with a minute portion of blue at the root of the lower mandible: its eye is of a fine glossy black, and the head and the nape of the neck are of a tawny colour, like dry leaves: all the fore side of the bird is yellow, streaked, like the European thrushes, with the colour of the head: all the back is greenish, but the wings are black, and its mantle is also black: the feathers of the wings have a green edging: the thighs and the upper part of the legs are grey; but the under part is entirely white, mixed with a little yellow; and the toes are furnished with small black nails, that are very sharp*.

This bird is continually on the wing, and never rests unless to feed: its song is slender, but mellow.

* Observations Physiques du P. Feuillée, p. 113.

THE RED-BREASTED FIG-EATER*.

Twenty-first Species.

EDWARDS has given the cock and hen of this bird, which he received from Pennsylvania, where they only pay a transient visit in the spring, in their way to spend the summer in the more northern provinces. They live on spiders and other insects.

The crown of the head is yellow, with white on each side, and a small black bar below the eyes: the upper surface of the neck, and the superior coverts of the wings, are blackish: the feathers on the upper part of the body, and the quills of the wings, are black, and edged with olive-green: the top of the breast,

* CHARACTER SPECIFICUS.

SYLVIA PENNSYLVANICA. S. pileo, flavescente, hypochondriis sanguineis.—*Lath. Ind. Orn.* ii. p. 540. No. 120.

MOTACILLA PENNSYLVANICA.—*Gmel. Syst.* i. p. 971.

FICEDULA PENNSYLVANICA ICTEROCEPHALOS.—*Bris. App.* p. 105.

LE FIGUIER à POITRINE ROUGE.—*Buff. par Sonn.* lii. p. 60.

RED-THROATED FLYCATCHER.—*Edw.* t. 301.

————— WARBLER.—*Lath. Syn.* iv. p. 490.

BLOODY-SIDE WARBLER.—*Arct. Zool.* ii. No. 298.

HABITAT

In Pennsylvania,

W.

and the sides of the body, are of a deep red; the throat and the belly whitish: the great superior coverts of the wings are tipped with white, which forms two white transverse bars on each wing: the bill and legs are black.

The female is distinguished from the male, by having no black on the back of the head, nor red on the breast.

THE CÆRULEAN FIG-EATER*.

Twenty-second Species.

WE are indebted to Edwards also for the description and history of this bird. He has given figures of the cock and hen, with the nest. They are found in Pennsylvania, where they arrive in the month of March, and remain through the summer, and again return to the south.

The head, and all the upper part of the body, are iron-grey: there is a black bar on each side of the head, above the eyes: all the under surface of the body is white: the wings are brown: the two outer quills on each side of the tail are

* CHARACTER SPECIFICUS.

SYLVIA CÆRULEA. S. supra cærulea, subtus alba, alis caudaque nigris.—*Lath. Ind. Orn.* ii. p. 540. No. 121.

MOTACILLA CÆRULEA.—*Gmel. Syst.* i. p. 992.

FICEDULA PENNSYLVANICA CINEREA.—*Bris. Sup.* p. 107.

LE FIGUIER GRIS DE FER.—*Buff. par Sonn.* lii. p. 62.

LITTLE BLUE-GREY FLYCATCHER.—*Edw.* t. 302.

CÆRULEAN WARBLER.—*Arct. Zool.* ii. No. 299.—*Lath. Syn.* iv. p. 490. 127.

HABITAT

in Pennsylvania.

W.

white: the third on each side has a white spot near the extremity; and what remains of it, as well as all the other quills of the tail, is of the same colour with the upper part of the body.

The female has not the black bars on the sides of the head, which is the only difference between it and the male.

These birds begin in April to construct their nests with the short woolly substance that surrounds the buds of trees, and with the down of plants: the outside is composed of a flat greyish moss or lichen, which they gather on the rocks: and there is an intermediate layer of horse hair. The form is nearly that of a short cylinder; close below, and having its aperture above.

It would appear that the bird, No. 704, fig. 1, *Pl. Enl.* and denominated *the black-headed fig-eater of Cayenne*, belongs to this species; for it is precisely like the male described by Edwards, except that the head, the quills of the wings, and those of the middle of the tail, are of a fine black; and this difference is only sufficient to constitute two varieties.

THE GOLDEN-WINGED FIG-EATER*.

Twenty-third Species.

WE borrow the account of this bird too from Edwards. It arrives in Pennsylvania in the month of April, and halts only a few days; it penetrates farther north, and returns to pass the winter in the milder climates.

The head is of a fine yellow, and there is a large spot of gold colour on the superior coverts of the wings: the sides of the head are

* CHARACTER SPECIFICUS.

SYLVIA CHRYSOPTERA. S. fusca, subtus alba, pileo maculaque alarum luteis, gula fasciaque per oculos nigris.
—*Lath. Ind. Orn.* ii. p. 541. No. 123.

MOTACILLA CHRYSOPTERA.—*Linn. Syst.* i. p. 333. 20.
—*Gmel. Syst.* i. p. 971.

FICEDULA PENNSYLVANICA CINEREA GUTTURE NIGRO.
—*Bris. Sup.* p. 169.—*Id.* 8vo. i. p. 458. 77.

LE FIGUIER AUX AILES DORÉES.—*Buff. par Sonn.* lii. p. 65.

GOLD-WINGED FLYCATCHER.—*Edw.* t. 299.

————— WARBLER.—*Arct. Zool.* ii. No. 295.—*Lath. Syn.* iv. p. 492. 118.

HABITAT

autumno et vere in Pennsylvania.

W.

white, with a broad black bar that surrounds the eyes: all the upper surface of the body, the wings, and the tail, are of a deep ash-colour: the throat and the lower part of the neck are black: the rest of the under surface of the body is white; the bill and legs are black.

THE GOLDEN-CROWNED FIG-EATER*.

Twenty-fourth Species.

WE adopt the epithet *golden-crowned*, given by Edwards. It is a bird of passage in Pennsylvania, where it appears in the spring; and, after halting a few days, it advances farther north; and on the approach of winter, it returns to the warmer climates.

On the crown of the head there is a round spot of a fine gold colour: the sides of the head, the wings, and the tail, are black: the upper part of the neck, the back, and the breast, are of a blue slate-colour, spotted with

* CHARACTER SPECIFICUS.

SYLVIA CORONATA. S. nigro maculata, pileo hypochondriis uropygioque flavis, fascia per oculos gulaque nigra.—*Lath. Ind. Orn.* ii p. 538. No. 115.

MOTACILLA CORONATA.—*Gmel. Syst.* i. p. 974.

FICEDULA PENSYLVANICA CINEREA NÆVIA.—*Bris. Sup.* p. 110.

LE FIGUIER COURONNE' D'OR.—*Buff. par Sonn.* lii. p. 67.

GOLDEN-CROWNED FLYCATCHER.—*Edw.* t. 298.

—————. **WARBLER.**—*Arct. Zool.* ii. No. 294.—*Lath. Syn.* iv. p. 486. 111.

HABITAT

in Pennsylvania vere; migratoria.

W.

black, and the sides of the body are yellow, with some black spots: all the under surface of the body is whitish: the great superior coverts of the wings are tipped with white, which forms two transverse white bars on each wing: the bill and legs are blackish.

The female differs not from the male, except that the upper surface of the body is brown, and there is no black on the sides of the head, nor on the breast.

THE ORANGE FIG-EATER*.

Twenty-fifth Species.

THIS species is new : it is found in Guiana, whence it was sent to the king's cabinet. The crown and sides of its head, the throat, the sides, and under surface of its neck, are of a beautiful orange-colour, with two small brown bars on each side of the head. All the upper surface of the body, and the quills of the wings, are of a reddish brown : the superior coverts of the wings are variegated with black and white : the breast is yellowish, as well as the belly : the quills of the tail are black, and edged with yellowish : the bill is black, and the feet are yellow.

* CHARACTER SPECIFICUS.

SYLVIA CHRYSOCEPHALA. *S. rufo-fusca, subtus alba, capite antèrius colloque, subtus fulvis, tectricibus alarum albo nigroque variegatis, cauda nigra.*—*Lath. Ind. Orn.* ii. p. 541. No. 124.

MOTACILLA CHRYSOCEPHALA.—*Gmel. Syst.* i. p. 971.

LE FIGUIER ORANGE'.—*Buff. par Sonn.* lii. p. 69.

———— **E'TRANGER.**—*Pl. Enl.* 58. f. 3.

ORANGE-HEADED WARBLER.—*Lath. Syn.* iv. p. 492. 119.

HABITAT

in Guiana.

W.

THE CRESTED FIG-EATER*.

Twenty-sixth Species.

THIS bird has not been noticed by any naturalist. It is found in Guiana, where it is probably stationary, since it is seen at all seasons: it lives in cleared parts, feeds on insects, and has the same habit and economy with the other fig-eaters. The under side of its body is grey, mixed with whitish: and the upper is brown, shaded with green: it is distinguished from the other fig-eaters by its crest, which consists of small round feathers, half erect, fringed with white on a blackish brown ground, and bristled as far as the eye and the root of the bill. It is four inches long, including the tail: the bill and legs are of a yellowish-brown.

* CHARACTER SPECIFICUS.

SYLVIA CRISTATA. *S. virescens supra fusca, subtus grisea, capite crista plicatili fusca albo marginata.*—*Lath. Ind. Orn.* ii. p. 541. No. 125.

MOTACILLA CRISTATA.—*Gmel. Syst.* i. p. 972.

LE FIGUIER HUPPE.—*Pl. Enl.* 391. f. 1.—*Buff. par Sonn.* lii. p. 71. pl. 147. f. 1.

CRESTED WARBLER.—*Lath. Syn.* iv. p. 493. 120.

HABITAT

in Guianæ apricis.—4 pollices longa.

W.

THE BLACK FIG-EATER*.

Twenty-seventh Species.

ANOTHER species, which is also found at Cayenne, but which is rarer, is the Black Fig-eater; so termed, because the head and throat are shrowded with black, which extends over the top and sides of the neck, and on the wings, and backwards as far as the origin of the tail: the same black appears again in a broad bar on the tips of the quills, of which the first half is of a bay colour: there is a short streak of the same colour on the first

* CHARACTER SPECIFICUS.

SYLVIA MULTICOLOR. S. nigra, subtus alba, colli pectorisque lateribus cauda a basi ad medium fasciaque alarum rufis.—*Lath. Ind. Orn.* ii. p. 541. No. 126.

MOTACILLA MULTICOLOR.—*Gmel. Syst.* i. p. 972.

LE FIGUIER NOIR.—*Buff. par Sonn.* lii. p. 73.

ET JAUNE de CAYENNE.—*Pl. Enl.* 391.

f. 2.

RUFous-AND-BLACK WARBLER.—*Lath. Syn.* iv. p. 403.
121.

HABITAT

in Cayana, inter rariores.—5 pollices longa.

W.

six or seven quills of the wing, near their insertion, and on the sides of the neck and breast: the fore part of the body is whitish-grey: the bill and legs are yellowish-brown. This is one of the largest of the fig-eaters, for it is near five inches long.

THE OLIVE FIG-EATER *.

Twenty-eighth Species.

THIS is another fig-eater which is pretty common in Cayenne, where it is stationary. All the upper part of the body, and of the head, is of an olive-green on a brown ground; the same olive strikes also through the blackish-brown of the wings and tail: the lower part of the throat and breast, as far as the belly, is of a light yellow. It is also one of the largest of the fig-eaters, for it is near five inches long.

* CHARACTER SPECIFICUS.

SYLVIA ÆQUINOCTIALIS. S. fusco-viridis, subtus flavescens alba, gutture pectoreque pallide flavis, remigibus rectricibusque fuscis.—*Lath. Ind. Orn.* ii. p. 542 No. 127.

MOTACILLA ÆQUINOCTIALIS.—*Gmel. Syst.* i. p. 972.

LE FIGUIER OLIVE DE CAYENNE.—*Pl. Enl.* 635. f. 1. —
Buff. par Sonn. lii. p. 75.

ÆQUATORIAL WARBLER.—*Lath. Syn.* iv. p. 493. 122.

HABITAT

in Cayana.

W.

THE PROTHONOTARY FIG-EATER*.

Twenty-ninth Species.

THIS bird is called *Prothonotary* in Louisiana, and we shall retain the name, in order to discriminate it from the other fig-eaters. The head, the throat, the neck, the breast, and the belly, are of a fine jonquil yellow; the back olive; the rump cinereous; the inferior coverts of the tail white; the quills of the wings, and of the tail, blackish and cinereous; the bill and the legs black.

* CHARACTER SPECIFICUS.

SYLVIA PROTONOTARIUS. S. flava, dorso olivaceo, uropygio cinereo, remigibus restrictibusque cinereo et nigricante variis.—*Lath. Ind. Orn.* ii. p. 542. No. 128.

MOTACILLA PROTONOTARIUS.—*Gmel. Syst.* i. p. 972.

LE FIGUIER PROTONOTAIRE.—*Buff. par Sonn.* lii. p. 76. pl. 147. f. 2.

LE FIGUIER à VENTRE ET TÊTE JAUNES.—*Pl. Enl.* 704. f. 2.

PROTHONOTARY WARBLER.—*Arct. Zool.* ii. No. 310.—
—*Lath. Syn.* iv. p. 494. 123.

HABITAT

in Louisiana.

W.

Beside the foregoing twenty-nine species of fig-eaters, which are all natives of the New World, there are five species or varieties in Louisiana alone. The specimens are preserved in M. Mauduit's cabinet, and were brought by Le Beau, king's physician in Louisiana.

THE HALF-COLLARED FIG-EATER*.

Thirtieth Species.

THIS little bird is of a very light ash-colour below the throat, and on all the under surface of the body: there is a yellowish half collar on the lower part of the neck: the upper side of the head is olive, bordering on yellow: there is a cinereous bar behind the eyes: the superior coverts of the wings are brown, edged with whitish; and the middle quills are also brown, but edged with olive, and tipped with white: the belly has a yellowish tint: the quills of the tail are cinereous: the two middle ones have no white: the four on each side of

* CHARACTER SPECIFICUS.

SYLVIA SEMITORQUATA. *S. fusca, subtus flavo-cinereus, cervice infima lunula flava, pectricibus quatuor extimis intus albis.*—*Lath. Ind. Orn.* ii. p. 542. No. 129.

MOTACILLA SEMITORQUATA.—*Gmel. Syst.* i. p. 972.

LE FIGUIER à DEMI COLLIER.—*Buff. par Sonn.* lii. p. 78.

HALF-COLLARED WARBLER.—*Arct. Zool.* ii. No. 311.

—*Lath. Syn.* iv. p. 494. 124.

HABITAT

in Louisiana.—4½ pollices longa.

W.

94 THE HALF-COLLARED FIG-EATER.

these are edged with white on the inside: all the ten are pointed at the end: the bill is blackish above, and whitish below. The bird is four inches and a half long; the tail twenty-one lines, and projecting ten lines beyond the wings; the legs are blackish.

THE YELLOW-THROATED FIG-EATER *.

Thirty-first Species.

THE throat, the neck, and the top of the breast, are yellow; only the top of the breast is a little more dusky: the rest of the under side of the body is rusty, verging to yellow on the inferior coverts of the tail: the head and the upper side of the body are brown-olive: the small inferior coverts of the wings are yellow, variegated with brown, which forms a distinct yellow border: the quills of the wings are brown; the middle ones edged with olive, and the great ones with light-grey,

* CHARACTER SPECIFICUS.

SYLVIA FULVA. *S. fulvo-olivacea, subtus rufa, collo inferiore crissoque flavis.* — *Lath. Ind. Orn.* ii. p. 542. No. 130.

MOTACILLA FULVA. — *Gmel. Syst.* i. p. 973.

LE FIGUIER à GORGE JAUNE. — *Buff. par Sonn.* lii. p. 80.

ORANGE-BELLIED WARBLER. — *Arct. Zool.* ii. No. 312. — *Lath. Syn.* iv. p. 495, 125.

HABITAT

cum semitorquata.

W.

96 THE YELLOW-THROATED FIG-EATER.

which, growing more dilute, becomes white on the first quill: those of the tail are brown, edged with olive: the bill is brown above, and lighter brown below: the legs are of a yellowish-brown.

THE OLIVE-BROWN FIG-EATER *.

Thirty-second Species.

THE upper side of the head, of the neck, and of the body, is brown, verging on olive; the superior coverts of the tail olive: the throat, the fore part of the neck, the breast, and the flanks, are whitish, and variegated with grey streaks: the belly is yellowish-white: the inferior coverts of the tail are entirely yellow: the superior coverts of the wings, and their middle quills, are brown, edged with a lighter brown, and tipped with whitish: the great quills of the wings are brown, edged with light grey: the quills of the tail are also brown, edged with light grey, and with a yellowish

* CHARACTER SPECIFICUS.

SYLVIA FUSCA. *S. fusco-olivacea*, subtus albo flavescens, collo subtus griseo alboque nebuloso, rectricibus duabus extimis intus ad apicem albo maculatis.—*Lath. Ind. Orn.* ii. p. 543. No. 131.

MOTACILLA FUSCA.—*Gmel. Syst.* i. p. 973.

LE FIGUIER BRUN-OLIVE.—*Buff. par Sonn.* lii. p. 82.

OLIVE-BROWN WARBLER.—*Arct. Zool.* ii. No. 313.—*Lath. Syn.* iv. p. 495. 126.

HABITAT

in Louisiana.

W.

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tint on the middle ones : the two lateral ones on each side are marked with a white spot at the extremity of their interior surface, and the first on each side is tipped with white : the bill is brown above, and of a diluter brown below ; the legs are brown.

THE GRASSET FIG-EATER*.

Thirty-third Species.

THE upper side of the head and of the body is of a deep greenish-grey, or of a coarse olive-green, with a yellow spot on the head, and black streaks on the body: the rump is yellow: the throat, and the under side of the neck, are of a rusty colour, through which the deep cinereous ground appears: the rest of the under side of the body is whitish: the great quills of the wings are brown, edged exteriorly with grey, and interiorly with whitish: the middle quills are blackish, edged exteriorly and

* CHARACTER SPECIFICUS.

SYLVIA PINGUIS. S. griseo-olivacea, subtus albida, macula verticis uropygioque flavis, rectricibus quatuor extimis intus albo maculatis.—*Lath. Ind. Orn.* ii. p. 543. No. 192.

MOTACILLA PINGUIS.—*Gmel. Syst.* i. p. 973.

LE FIGUIER GRASSET.—*Buff. par Sonn.* lii. p. 84.

GRASSET WARBLER.—*Arct. Zool.* ii. No. 314.—*Lath. Syn.* iv. p. 496. 127.

HABITAT

in Louisiana.

W.

tipped with grey: the quills of the tail are black, edged with grey: the four lateral quills are each marked with a white spot near the end of their interior surface: the bill and legs are black.

THE ASH-THROATED CINEREOUS FIG-EATER*.

Thirty-fourth Species.

THE head and the upper side of the body are cinereous: the throat and all the under side of the body are of a lighter cinereous: the quills of the wings are cinereous, edged with whitish; the quills of the tail black; but the first on each side is almost entirely white: the second quill is white on the half next the end: the third is only tipped with white: the bill is black above, and grey below.

This and the preceding are called *grassets* in Louisiana, because they are very fat (*gras*). They perch on the tulip-trees, particularly on the magnolia, which is an evergreen species.

* CHARACTER SPECIFICUS.

SYLVIA CANA. S. cinerea, subtus grisea, cauda nigra, rectricibus 1, 1, toto, 2, 2, 3, 3, apice albis—*Lath. Ind. Orn.* ii. p. 543. No. 133.

MOTACILLA CANA.—*Gmel. Syst.* i. p. 973.

LE FIGUIER CENDRE' à GORGE CENDRE'E.—*Buff. par Sonn.* lii. p. 86.

GREY-THROATED WARBLER.—*Arct. Zool.* ii. No. 315.
—*Lath. Syn.* iv. p. 496, 128.

HABITAT

cum precedentibus.

W.

THE GREAT FIG-EATER of Jamaica¹.

Thirty-fifth Species.

EDWARDS was the first who described this bird. He terms it the *American Nightingale*. But it is by no means a nightingale, and it has all the characters of the fig-eaters, with which Brisson has properly ranged it. The upper mandible is blackish; the lower flesh-coloured: the upper surface of the back, of the head, and of the wings, is brown, with an obscure tinge of

* CHARACTER SPECIFICUS.

SYLVIA CALIDRIS. S. fusco-virescens, subtus fulva, linea oculari subocularique nigra, rectricibus apice luteis.—

—*Lath. Ind. Orn.* ii. p. 543. No. 134.

MOTACILLA CALIDRIS.—*Gmel. Syst.* i. p. 950.

FICEDULA JAMAICENSIS MAJOR.—*Bris. Sup.* p. 101.

ICTERUS MINOR NIDUM SUSPENDENS.—*Raii Syn.* p. 184.

27?—*Sloan. Jam.* ii. p. 299?

LE GRAND FIGUIER de la JAMAIQUE.—*Buff. par Sonn.* lii. p. 87.

AMERICAN NIGHTINGALE.—*Edw. t.* 121. f. 2.

HANG-NEST WARBLER.—*Lath. Syn.* iv. p. 497. 129.

HABITAT

in Jamaica.

W.

greenish: the edges of the quills are of a lighter greenish-yellow: an orange colour predominates on the under side of the body, from the throat to the tail: the inferior coverts of the wings, and all those of the tail, and also the inner webs of the quills, are of the same colour. From the angle of the bill a black streak stretches across the eye; another extends below it: between these two, and under them, the orange forms two bars: the legs and toes are blackish. The bird is nearly as large as the redbreast, and not quite so thick. Edwards remarks that it bears great resemblance to what Sloane, in his *Natural History of Jamaica*, calls the *Icterus Minor*, *nidum suspendens*.

WE cannot omit noticing three birds which our nomenclators have confounded with fig-eaters, but which are undoubtedly of a different kind.

These are, 1. *The Great Fig-eater of Jamaica*, mentioned by Brisson in his *Supplement*: its bill is entirely different from that of the fig-eaters.

2. *The Pennsylvanian Fig-eater**, which is also distinguished from the fig-eaters by its

* *The Motacilla Vermivora* of Gmelin, or the *Worm-eater*, which is the subject of the next article.

bill, and appears to be of the same genus with the preceding.

3. *The Great Fig-eater of Madagascar*, in the Ornithology of the same author, which has rather the bill of the blackbird than of the fig-eater.

THE MIDDLE BILLS*.

WHEN we compare the birds which inhabit the two continents, we perceive that those with strong bills, and which feed upon grain, are the most numerous in the old; but, on the contrary, those which have slender bills, and subsist upon insects, predominate in the new. This circumstance strikingly evinces the extensive influence which human industry has upon the productions of nature: for it is obviously the cultivation of the various sorts of corn, subservient to the support of man, that has multiplied the granivorous birds. In the vast deserts of America, in her magnificent forests, and her immense savannas, where rude unassisted nature yields nothing similar to our corn, and affords only fruits and small seeds, with enormous quantities of insects, there the number of the species of birds which feed on these, and have slender bills, is proportionally great: but an insensible gradation connects the various productions of the universe, and bids defiance to the shackles of system. Between the birds with strong bills and those with slender ones there is an intermediate class, which, though it has never been admitted by

* Les Demi-fins.—*Buff.*

nomenclators *, has a real existence. It comprehends those birds in the New World which have stronger bills than the *pipits*, but not so strong as the *tanagres*; and also those birds of the old continent which have stronger bills than the *fauvettes*, but not so strong as the larks. We might refer to it not only the *calandre* and other larks, but many species which have been ranged in other classes, because this was not yet formed. Lastly, the titmice will occupy the place between the middle-bills and those which have slender bills: for though they appear delicate, yet, if we compare their thickness with their shortness, and consider that they can break a nut, and pierce the head of much larger birds, we shall be convinced that they have considerable strength.

* When this article was sent to the press, I found that Edwards, in his Catalogue of Birds, &c. at the end of his seventh volume, has reckoned among those with bills of middle thickness, the following birds:

1. His Scarlet Bird.
2. His Red Summer Bird.
3. His White-faced Manakin.
4. His American Hedge-sparrow.
5. His Indian Red-tail.
6. His Olive Flycatcher.
7. His Worm-eater.

THE 'WORM-EATER'*

THIS bird is entirely different from another Worm-eater mentioned by Sloane: it is discriminated by its climate, and by its natural qualities. The bill is pretty sharp, brown above, and flesh-coloured below: its head is orange, and on each side there are two black bars, of which the one passes across the eye, and the other below it; and they are separated by a yellowish bar, beyond which they join near the back of the head: the throat and the breast are also of an orange-colour, but which grows more dilute, as it diverges from the anterior parts, and is only whitish on the inferior

* CHARACTER SPECIFICUS.

SYLVIA VERMIVORA. *S. viridi-olivacea, subtus albida, capite collo subtus pectoreque aurantius, fascia per oculos arcuque supra nigris, supercilus albis.*—*Lath. Ind. Orn.* ii. p. 544. No. 138.

MOTACILLA VERMIVORA.—*Gmel. Syst.* i. p. 951.

FICEDULA PENNSYLVANICA.—*Bris. Sup.* p. 102.

LE DEMI-FIN MANGEUR DE VERS.—*Buff. per Sonn.* lii. p. 120.

WORM-EATER.—*Arct. Zool.* ii. No. 309. — *Edw.* t. 305.
—*Lath. Syn.* iv. p. 499 133.

HABITAT

in Pennsylvania.—Migratoria.

W.

coverts of the tail : the upper side of the neck, the back, the wings, and the tail, are of a deep olive-green : the inferior coverts of the wings are of a yellowish-white : the legs are flesh-coloured.

This bird is found in Pennsylvania, where it is migratory, as are all those with slender bills, and some of those which have strong bills. It arrives in the month of July, and advances towards the north ; but it is not seen, in that province, to return again in autumn ; and the same is the case with all the others which pass in the spring. Edwards supposes that their route to the south lies beyond the Apalachian mountains ; and undoubtedly they must be induced to change their track, by the greater abundance of insects and worms which the back countries then afford.

This Worm-eater is somewhat larger than the black-cap.

THE BLACK-AND-BLUE MIDDLE-BILL*.

KOELREUTER†, who first described this bird, says that it is a very rare species, and brought from India. He tells us that the bill is longer and more slender than in the finches‡, and consequently it ought to be referred to the class of the Middle-bills.

Except, the bill, which is brown, and the legs, which are also brown, but more dilute, this bird has only black and blue on its plumage: the black is spread on the throat, the bottom of the wing, and the fore part of the

* CHARACTER SPECIFICUS.

FRINGILLA CYANOMELAS. *F. cærules*, linea frontali gula lunulaque dorsali nigris, remigibus fuscis, cauda nigricante.—*Lath. Ind. Orn.* i. p. 464. No. 102.

FRINGILLA CYANOMELAS.—*Gmel. Syst.* i. p. 924.

DEMI-FIN NOIR ET BLEU.—*Buff. par Sonn.* lii. p. 123.

BLUE-HEADED FINCH.—*Lath. Syn.* iii. p. 319. 92.

HABITAT

in India.

W.

† “Blue finch; its chin, its throat, the base of its wings, and the fore part of its back, black.”—*J. T. Koelreuter, Petersburg Transactions for 1765*, p. 434.

‡ It is odd, that, after making that assertion, he should reckon it a finch.

back, where it forms a semi-circle, whose convexity is turned towards the tail : besides this, there is a black streak which joins each nostril to the eye on the same side : the quills of the wings are blackish, edged with blue, and this edging is broader in the middle ones : all the rest of the plumage is varying blue, with copper-coloured reflexions.

This bird is nearly as large as the greater red-poll : its bill is five lines and a half long, and its tail consists of twelve equal quills.

THE BLACK-AND-RUFOUS MIDDLE-BILL*.

COMMERSON saw this bird at Buenos-Ayres. All the upper side of the head and body, from the base of the bill to the end of the tail, is of a distinct black: the throat, the fore part of the neck, and the flanks, are of a rust colour: there is some white between the forehead and the eyes, at the rise of the throat, on the middle of the belly, at the bottom of the wings, and at the extremity of the exterior quills of the tail: the bill is blackish; the nostrils very near its base, and half covered with small feathers: the iris is chesnut: the pupil is blackish-blue; the tongue triangular, and not divided at the tip; lastly, the hind nail is the strongest of all.

* CHARACTER SPECIFICUS.

SYLVIA BONARIENSIS. S. nigra, subtus ferruginea, gula loris abdomine medio rectricibusque extimis apice albis.

—*Lath. Ind. Orn.* ii. p. 543. No. 135.

MOTACILLA BONARIENSIS.—*Gmel. Syst.* i. p. 951.

LE DEMI-FIN NOIR ET RÔUX.—*Buff. par Sonn.* lii. p. 125.

WHITE-CHINNED WARBLER.—*Latn. Syn.* iv. p. 497. 130.

HABITAT

in Bonaria.—5½ pollices longa.

W.

Commerson, induced no doubt by the shape of its bill, assigns this bird a place between the finches and the birds with slender bills*: and, for this reason, I have ranged it with the Middle-bills. The name of finch, according to Commerson himself, does not correspond with it, though he is obliged, for want of another term, to apply that. The bird is nearly as large as the linnet.

Total length five inches and two-thirds; the bill five lines; the tail twenty-six lines, and consists of twelve quills; and it projects twenty lines beyond the wings, which contain sixteen or seventeen quills.

* M. Commerson seems often to lean to the system of Linnaeus.

THE BIMBELE', or BASTARD LINNET*.

I owe the information which I have obtained in regard to this bird to the Chevalier Le Fevre Deshayes, who sent me a drawing of it. It is called *Bimbelé* by the negroes, from its resemblance to an African bird of that name. But probably this appellation is not better applied than that of Bastard Linnet; for the bird resembles the linnet neither in its song, in its plumage, nor the shape of its bill.

Its song is not varied or rich: it turns on four or five notes. However, it is pleasant: for the tones are full, soft, and mellow.

It lives on fruits and small seeds. It prefers

* CHARACTER SPECIFICUS.

SYLVIA PALMARUM. S. fusca; subtus albo-flavescens, uropygio olivaceo, remigibus rectricibusque fuscis.—*Lath. Ind. Orn.* ii. p. 544. No. 136.

MOTACILLA PALMARUM.—*Gmel. Syst.* i. p. 951.

LE BIMBELE', ou FAUSSE LINOTTE.—*Buff. par Sonn.* lii. p. 127.

PALM WARBLER.—*Lath. Syn.* iv. p. 498. 131.

HABITAT

in insula Dominicensi.—5 pollices longa.

W.

the haunt of the palms, and builds its nest in a sort of roost, which the palm birds and others form on those trees, at the place where the foot-stalk supporting the cluster is inserted. It lays only two or three eggs, and this is perhaps one of the reasons the *Bimbelés* are so rare.

Its plumage is still inferior to its song: the throat, the fore part of the neck, the breast, and the top of the belly, are dirty white, tinged with yellow: the legs, the lower belly, and the inferior coverts of the tail, are of a faint yellow; the flanks deep grey: all the upper part brown, deeper on the head, and lighter on the back: the rump and the superior coverts of the tail are olive-green: the quills, and the superior coverts of the wings, and the quills of the tail, brown, edged exteriorly with a lighter colour: the two outer pairs of the tail-quills edged interiorly with a broad bar of pure white near their extremity: the lower face of all these quills is of a slate-grey: the iris is light-brown.

The *Bimbelé* weighs rather less than two gros and a half.

Total length five inches; the bill seven lines, very acute: the nostrils oblong, with a protuberance; the alar extent seven inches; eighteen quills in each wing; the tail about eighteen lines, composed of twelve quills nearly equal, and projects an inch beyond the wings.

THE BANANA WARBLER

WE have already noticed a Jamaica bird among the finches, and termed it *bonana*, but which must be discriminated from this. The present is much smaller, its plumage is different, and, though it haunts the same tree, its habits are probably distinct. We might decide this matter, if the bird mentioned by Sloane were as well known as that which we are to describe from a coloured drawing, and an account of it sent by the Chevalier Deshayes. It is found in Saint Domingo, and the negroes affirm that it suspends its nest: it is often seen on the bananas; but other birds also feed on the fruit of these trees, and therefore the name is not appropriated to it.

* CHARACTER SPECIFICUS.

SYLVIA BANANIVORA. *S. griseo-nigricans*, subtus uropygiouque flavescente, fascia per oculos nigra, superciliis macula alarum rectricibusque apice albis.—*Lath. Ind. Orn.* ii. p. 544. No. 137.

MOTACILLA BANANIVORA.—*Gmel. Syst. i.* p. 951.

LE BANANISTE—*Buff. par Sonn.* iii. p. 130.

BANANA WARBLER.—*Lath. Syn.* iv. p. 498. 132.

HABITAT

in insulæ Dominicensis incultis.—3? pollices longa. W.

The Banana Warbler has a bill somewhat curved, very acute, and of a middle size. Besides bananas, it feeds on oranges, citronelles, avigato pears, and papaws. We cannot decide whether it also eats seeds or insects; but certainly there were no traces of these in the stomach of the one dissected. It lodges in the banana plantations, in the grounds uncultivated and covered with bushes. It flies by starts and jerks, and its motion is rapid, and attended with a little noise. Its warble is scarcely varied: it is a series of cadences that rest more or less on the same tone.

But though the banana flies swiftly, Deshayes regards it as too weak and delicate to perform distant journeys, and to support the cold of the northern climates; he therefore concludes it to be a native of the new continent.

The upper side of the body is of a deep grey, almost blackish, which approaches to brown on the tail, and the coverts of the wings: the quills of the tail are not so deep coloured as those of the wings, and are tipped with white: it has a sort of white eyebrows: the eyes are placed in a black bar, which rises from the bill, and melts into the dark colour of the back of the head: the throat is ash-grey: the breast, the belly, and the rump, are of a delicate yellow: the flanks, the thighs, and the inferior coverts of the tail, are variegated with light yellow and grey: some of the inferior coverts are white, and rise on the tail: the anterior

part of the shoulders is of a fine yellow: the bill is black; the legs are slate-grey.

Total length, three inches eight lines; the bill four lines; the nostrils broad, and like an inverted crescent, with a protuberance of the same shape, but of an opposite position: the tongue pointed; the *tarsus* seven lines; the alar extent six inches; the wings composed of seventeen quills; the tail fourteen or fifteen lines, and exceeds the wings about six or seven lines.

THE MIDDLE-BILL*,

With white Crest and Throat.

ALL that Edwards, who first described and figured this bird, mentions in regard to its history, is, that it is a native of South America and of the adjacent islands, such as Cayenne. Its crest consists of white feathers, which are long, narrow, and pointed: in the placid state they are reclined on the head, but when the bird is agitated by passion they become erect: the throat is white, edged with a black belt, which stretches from the one eye to the other: the back of the head, the fore part of the neck, the breast, the belly, the rump, the quills of the tail, their coverts both superior and inferior,

* CHARACTER SPECIFICUS.

PIPRA ALBIFRONS. P. crista alba, corpore rubro testaceo, dorso nigro, gutture albo nigro marginato, femoribus cærulescentibus.—*Lath. Ind. Orn.* ii. p. 560. No. 21.

PIPRA ALBIFRONS.—*Gmel. Syst.* i. p. 1000.

LE DEMI-FIN à HUPPE ET GORGE BLANCHES.—*Buff. par Sonn.* lii. p. 133.

WHITE-FACED MANNAKIN.—*Edw.* t. 344.—*Lath. Syn.* iv. p. 530. 18.

HABITAT

in America australi.—5½ pollices longa.

W.

and the inferior coverts of the wings, are orange, which is more or less bright: the top of the back, the lower part of the neck joining the quills of the wings, their superior coverts, and the thighs, are of a deep cinereous, verging more or less on blue: the bill is black, straight, pretty acute, and of a middle size: the legs are orange-yellow.

Total length five inches and a quarter; the bill eight or nine lines; the *tarsus* ten lines; the outer toe connected almost its whole length to the mid-toe; the tail composed of twelve quills, and projects eight or nine lines beyond the wings*.

* Virey says, this bird ought to be ranked among the manakins, of which it is a true species. Its crest and shape also denote its habits. All these birds, or at least the major part of them, inhabit the southern regions of America. W.

THE SIMPLE WARBLER*.

EDWARDS regrets in some measure that the plumage of this bird is too simple and uniform, and that it has no peculiarity to characterise it. I shall adopt this very simplicity as the character. A sort of cinereous cowl, with a slight tinge of green, covers the head and neck: all the upper side of the body, including the wings and the tail, is of a rusty-brown: the quills are ash-coloured beneath; the bill black, and the legs brown.

This bird is of the size of the hedge-sparrow, but it is not of the same species, though Edwards has applied the same name; he expressly says that its bill is thicker and stronger. It is found in Jamaica.

* CHARACTER SPECIFICUS.

SYLVIA CAMPESTRIS. *S. grisea*, capite virescente-cinereo, rectricibus concoloribus, abdomine albido.—*Luth. Ind. Orn.* ii. p. 544. No. 139.

MOTACILLA CAMPESTRIS.—*Gmel. Syst.* i. p. 953.

CURRUCA SEPIARIA JAMAICENSIS.—*Bris. App.* p. 100.

L'HABIT-UNI.—*Buff. par Sonn.* lii. p. 135.

AMERICAN HEDGE-SPARROW.—*Edw.* t. 122. f. 1.

SIMPLE WARBLER.—*Luth. Syn.* iv. p. 500. 134.

HABITAT

in Jamaica.

W.

THE PITPITS.

THOUGH these birds bear great resemblance to the fig-eaters, and also inhabit the new continent, the difference is still so considerable, that they ought to be regarded as forming a distinct and separate genus. Most of the fig-eaters are migratory: all the Pitpits continue settled in the hottest parts of America. They remain in the woods, and perch on the large trees; whereas the fig-eaters haunt only the cleared grounds, and lodge among the bushes, and on the middle-sized trees. The Pitpits are also more social than the fig-eaters: they keep in large flocks, and mix familiarly with the small birds of other species: they are more joyous and lively, and are continually hopping. But besides the difference of their habits, they are also discriminated by their conformation: their bill is thicker, and not so slender as that of the fig-eaters; and for this reason we have placed the middle-bills between them and the fig-eaters. The tail of the Pitpits is also square-terminated, while, in the fig-eaters, it is somewhat forked. These two characters, drawn from the bill and the tail,

are a sufficient foundation for forming two genera of these birds.

We know only five species of the Pitpits, and they are all found in Guiana and Brazil, and are nearly of the same size.

THE GREEN PITPIT*.

First Species.

THE Pitpits are in general nearly as large as the fig-eaters, but rather thicker: they are four and a half or five inches long. In the kind which we call the *Green Pitpit* the head and the small superior coverts of the wings only are of a fine blue, and the throat of a blueish-grey; but all the rest of the body and the great superior coverts of the wings are of a brilliant green: the quills of the wings are brown, edged exteriorly with green: those of the tail are of a duller green: the bill is brown, and the legs grey. It is pretty common at Cayenne.

* CHARACTER SPECIFICUS.

SYLVIA CYANOCEPHALA. S. viridis, capite tectricibusque alarum caeruleis, gula griseo-caerulescente, remigibus fuscis.—*Lath. Ind. Orn.* ii. p. 546. No. 144.

MOTACILLA CYANOCEPHALA.—*Gmel. Syst.* i. p. 990.

SYLVIA VIRIDIS.—*Eris.* iii. p. 531. 70. t. 23. f. 4.

LE PITPIT VERD.—*Buff. par Sonn.* lii. p. 139.

BLUE-HEADED WARBLER.—*Lath. Syn.* iv. p. 503. 130.

HABITAT

in Cayana.—4½ pollices longa.

W.

THE BLUE PITPIT*.

Second Species.

THIS is as frequent at Cayenne as the preceding: it is nearly of the same size, but it forms a separate species, which even includes varieties. The face, the sides of the head, the anterior part of the back, the wings, and the tail, are of a fine black: the rest of the plumage is of a fine blue: the bill is blackish, and the legs grey.

* CHARACTER SPECIFICUS.

SYLVIA CAYANA. *S. cærulea*, capistro humeris alis caudaque nigris.—*Lath. Ind. Orn.* ii. p. 545. No. 143.

MOTACILLA CAYANA.—*Gmel. Syst.* i. p. 990.

SYLVIA CAYANENSIS CÆRULEA.—*Bris.* iii. p. 534. 72. t. 28. f. 1.

ELOTOTOTL QUARTA.—*Raii Syn.* p. 170 ?

LE PITPIT BLEU.—*Ruff. Pl. Enl.* 669. f. 2.—*Buff. par Sonn.* lii. p. 141. pl. 148. f. 1.

CAYENNE WARBLER.—*Lath. Syn.* iv. p. 502. 138,

HABITAT

in Cayana.—4½ pollices longa.

W.

VARIETIES of the BLUE PITPIT.

1. THE bird called by Edwards the *blue manakin*: for the only difference it has from the Blue Pitpit is, that the throat is black, and the face, as well as the sides of the head, blue, like the rest of the body.

2. The bird figured in the *Planches Enluminees*, No. 669, fig. 1, and denominated the *Blue Pitpit of Cayenne*; the only difference being, that it has no black on the face, or on the sides of the head.

We must observe that Brisson regards the Mexican bird given by Fernandez under the name of *elotototl*, as a Blue Pitpit: but we cannot discover any foundation for this opinion; since Fernandez is the only one who has seen that bird, and all that he says is, "that the *elotototl* is hardly so large as a goldfinch; that it is white or blueish, and its tail black; that it inhabits the mountains of Tetzocano; that its flesh is palatable; that it has no song; and, for that reason, is not bred in houses." From this account, it is impossible to conclude that this Mexican bird is a Blue Pitpit more than any other species.

THE VARIEGATED PITPIT*.

Third Species.

THIS bird is found at Surinam and Cayenne. The face is of a sea-green: the upper side of the head, of the neck, and of the back, is of a fine black: the rump is golden green; the throat violet-blue; the lower part of the neck and breast variegated with violet and brown; the rest of the under side of the body rufous; the superior coverts of the tail, and the small coverts of the upper side of the wings, blue; the great coverts and quills of the wings, and those of the tail, black, edged with blue: the upper mandible is brown; the lower whitish: the legs are cinereous.

* CHARACTER SPECIFICUS.

SYLVIA VELIA. *S. nigra viridi cæruleo varia, subtus rufa, collo subtus violaceo, uropygio viridi-aureo.*—*Lath. Ind. Orn.* ii. p. 546. No. 146.

MOTACILLA VELIA.—*Gmel. Syst.* i. p. 991.

LE PITPIT VARIE'—*Buff. par Sonn.* lii. p. 144.

PITPIT BLEU DE SURINAM.—*Pl. Enl.* 669. f. 3.

RED-BELLIED WARBLER.—*Lath. Syn.* iv. p. 504. 141:

HABITAT

in Surinamo, Guiana, Cayana.

W.

THE BLUE-CAPPED PITPIT*.

Fourth Species.

THIS is a new species, and, like the rest, it is found in Cayenne: We call it the *Blue-Capped Pitpit* †, because it has a sort of cap of a deep bright blue, which rises on the face, passes over the eyes,* and reaches to the middle of the back; only on the 'crown of the head there is a blue longitudinal spot. It is conspicuous from a white ray that begins at the middle of the breast, and extends spreading to the under side of the tail: the rest of the under side of the body is blue: the bill and legs are black.

* CHARACTER SPECIFICUS.

SYLVIA LINEATA. S. corpore subtus maculaque verticis cæruleis, fronte vitta superciliari lateribusque, colli cæruleo-nitidis, fascia pectoris abdominisque alba.—*Lath. Ind. Orn.* ii. p. 546. No. 145.

MOTACILLA LINEATA.—*Gmel. Syst.* i. p. 992.

LE PITPIT à COIFFE BLEUE.—*Buff. par Sonn.* lii. p. 347.

BLUE-STRIPED WARBLER.—*Lath. Syn.* iv. p. 504. 140.

HABITAT

in Cayana.

W.

† Pitpit à Coiffe Bleue.

THE GUIRA-BERABA *.

Fifth Species.

THIS bird, which Marcgrave has described, appears to me to belong to the Pitpits; though his account is not sufficiently complete to preclude its being ranged with the fig-eaters. It is as large as the goldfinch, which exceeds the ordinary size of the fig-eaters, and even of the Pitpits. The upper side of its head, its neck,

* CHARACTER SPECIFICUS.

SYLVIA GUIRA. *S. viridis*, subtus uropygioque lutea, genis gulaque nigris linea lutea cinctis.—*Lath. Ind. Orn.* ii. p. 547. No. 147.

MOTACILLA GUIRA.—*Gmel. Syst.* i. p. 988.

TANAGRA NIGRICOLLIS.—*Gmel. Syst.* i. p. 894.

SYLVIA BRASILIENSIS VIRIDIS.—*Brisson.* iii. p. 533. 71.

GUIRA GUACU BERABA.—*Rau Syn.* p. 83. 10.—*Will.* p. 173. t. 41.—*Id. (Angl.)* p. 239. t. 41.—*Eaw.* t. 351. f. i.

LE TANGARA à GORGE NOIR.—*Buff.* iv. p. 283.—*Pl. Enl.* 720. f. 1.

LE GUIRA BERABA.—*Buff. par Sonn.* lii. p. 147.

GUIRA WARBLER.—*Arct. Zool.* ii. No. 316.—*Lath. Syn.* iv. p. 505. 142.

BLACK-THROATED TANAGER.—*Lath. Syn.* iii. p. 237. 33.

HABITAT

in Brasilia.

W.

its back, its wings, and its tail, are of a light green: its throat is black: the rest of the under side of the body and the rump is of a gold-yellow: some quills of the wings are brown at their ends: the bill is straight, sharp, and yellow, with a little black on the upper mandible: the legs are brown.

We must observe that Brisson has confounded this bird with that which Piso has given under the name of *guira-perea*, though they are certainly different; for the *guira-perea* of Piso has its plumage entirely gold colour, except the wings and the tail, which are light-green: it is besides spotted like the stare on the breast and the belly. We need only to compare the two descriptions, to see evidently that the *guira-perea* of Piso is not the same bird with the *guira-beraba* of Marcgrave, and that they have only the common name of *guira*, but with different epithets.

THE YELLOW WREN*.

THE three smallest of our European birds are the gold-crested wren, the common wren,

* CHARACTER SPECIFICUS.

SYLVIA TROCHILUS. *S. cinereo-virens*, alis, subtus trochicibusque flavescentibus, superciliis luteis.—*Lath. Ind. Orn.* ii. p. 550. No. 155.

MOTACILLA TROCHILUS.—*Gmel. Syst.* i. p. 995.

————— HISPANICA.—*Hassclq. It.* 287. 52.—*Id. Voy.* p. 206. 51.

ASILUS.—*Bris.* iii. p. 479. 45.—*Raii Syn.* p. 80. A. 10.—*Will.* p. 164.—*Id. (Angl.)* p. 228.

LE POUILLOT.—*Buff. Pl. Enl.* p. 651. f. 1.—*Buff. par Sonn.* lii. p. 149. pl. 148. f. 2.

GREEN WREN †.—*Alb.* ii. t. 86. 6.

YELLOW WREN.—*Br. Zool.* i. No. 151.—*Arct. Zool.* ii. No. 319.—*Lath. Syn.* iv. p. 512. 147.

HABITAT

in Eufopa, America; frequens in Anglia.—4½ pollices longa.
W.

† The Greek name Οἰστρός, and the Latin *Asilus*, signify a horse-fly or gad-bee: and hence were applied to this bird, probably on account of its diminutive size. In Catalonian, *Xiuxerra*: in Polish, *Królic Nieczubaty*: in the Boulonois, *Reatin*: in Provence, *Fifi*: in Burgundy, *Fenerotel* or *Fretillet*: in Lorraine, *Tuit*: in Sologne, *Frclot*, *Frclotte*, *Fouillot*, *Toute-Vive*: in the Orleanois, *Vetti-Vetto*, *Tolitololo*: in Normandy, *Pouillot*, or *Pouliot*.

and the Yellow Wren. The latter, though not larger than the rest, is rather longer: it has the shape, the size, and figure, of a little fig-eater; for the Yellow Wren might be ranged, in that genus, which is already so numerous, were it not much better to give each species its proper name, which is well known, than to confound it among generic appellations. It might be termed the *little European fig-eater*, and I wonder that some nomenclator has not thought of this classification. Its French name *pouillot* is evidently derived from the Latin *pullus* or *pusillus*, signifying small and feeble.

The Yellow Wren feeds on flies and other little insects: its bill is slender and tapered, the outside of a shining brown, the inside and the edges yellow*: the plumage consists of two faint tints of greenish-grey and yellowish-white: the first spreads on the back and the head: a yellowish line, rising from the corner of the bill, passes near the eye, and extends to the temple: the quills of the wings are of a dull grey, and, like those of the tail, have their outer edge fringed with greenish-yellow: the throat is yellowish, and there is a spot of the same colour on each side of the breast, where the wing rests: the belly and the stomach are white, which is more or less dashed with a weak yellow, according to the age of the bird, or its difference of sex†: in general, the plumage

* Belon.

† Willughby.

of the Yellow Wren resembles that of the gold-crested wren, which has only an additional white spot on the wing, and a yellow crest*.

The Yellow Wren resides in the woods during summer: it builds its nest in the heart of the bushes, or in a tuft of thick herbage: the construction is as artful as it is concealed: the outside consists of moss, and the inside is lined with hair or wool: the whole is closely interwoven and covered, and is shaped like a ball, as that of the gold-crested wren, the common wren, and the long-tailed titmouse. It would seem that the voice of nature has directed these four very small birds to the structure of this nest; since their heat, if not guarded and concentrated, would be insufficient for incubation. And this is an additional proof that in all animals the faculty of propagating their species perhaps surpasses the instinct for self-preservation. The female of the Yellow Wren lays commonly four or five eggs, and sometimes six or seven, of a dirty white, dotted with reddish†. The young ones remain in the nest until they can fly with ease.

In autumn, the Yellow Wren leaves the

* Aldrovandus and Belon.

† Willughby and Ray.---"This little bird is much attached to its nest, which it will hardly forsake. A friend of mine told me that, one day having found a nest of this bird, he made it lay thirty eggs one after another, by removing one every day: after which he took pity on the tender dam, and suffered her to hatch."--*Salerne*.

woods, and sings in our gardens and vineyards: it seems to repeat the sounds *tuit, tuit*, which is the name it receives in some provinces*, as in Lorraine, where subsists no trace of the appellation *chofti*†, bestowed in the time of Belon; and which, according to him, signified *singer*, alluding to the variety and continuance of its warble‡, which lasts during the whole spring and summer. The song has three or four variations, which are mostly modulated: it begins with a slender broken cluck, which is succeeded by a series of silvery detached sounds, like the clinking of telling crown pieces: this is probably what Willughby and Albin compare to the stridulous voice of grasshoppers. After these two notes, very different from each other, the bird sings its full song; it is soft, pleasant, and well supported: it lasts during all the spring and summer; but in the month of August it gives place to a slender whistle, *tuit, tuit*, which is nearly the same in the red-tail and in the nightingale§.

* In Tuscany, *Lui*; it pronounces this name with a plaintive voice, says Olina, without having any other song. This seems to show that the Yellow Wren does not pass the summer in Italy; which is the more probable, as Olina afterwards mentions its being seen in winter.

† It has still this name in the forest of Orleans.—*Salerne*.

‡ This little bird varies infinitely its song: it is one of the first to announce the return of spring. I have heard it sing more than three weeks before the wild nightingale.—*Salerne*.

§ This is probably what Willughby terms a querulous voice.—*Ornithol.* p. 184,

The Yellow Wren is extremely active: it incessantly flutters briskly from one branch to another: it darts from its place to catch a fly: it returns and searches continually among the leaves, on both sides, for insects, which in some provinces has given occasion to the name of *frisker* (*fretillet*, *fenerotet*): it has a small oscillation of the tail upwards and downwards, but slow and regular.

These birds arrive in April, often before the leaves are unfolded. They form flocks of fifteen or twenty during their passage; but they immediately separate into pairs. Sometimes, shortly after their appearance, they are surprised by frosts, and drop dead in the roads*.

This delicate little species is however widely diffused. It even visits Sweden, where Linnæus says it inhabits the willow plots†. It is known in all the provinces of France: in Burgundy it is called *fenerotet*: in Champagne, *fretillet*: in Provence, *jifi*‡. It is also found in Italy§; and the Greeks seem to have known it by the term *οιστρος* || (*a gad-fly*). It is proba-

* "This little bird is so feeble, that if we cast a clod at the branch on which it sits, it will be stunned by the shake, and tumble off."—*Salerne*.

† *Fauna Suecica*, No. 236.. ‡ *M. Guys*. § *Aldrovandus*.

|| Aristotle (lib. viii. 3) only names the *οιστρος* between the *υπολαις* and the *τυραννος*, as one of those little birds that feed upon insects. "Two circumstances induce us to think that this is the *asilus*: the first, that it would be so called in Greece on account of its smallness; the second, that, as the

ble that the *small green wren*, which Edwards tells us was brought from Bengal, is only a variety of the European Yellow Wren*.

gad-fly makes a continual noise with its wings, so this bird sings almost incessantly.—Belon, *Nat. des Oiseaux*, p. 344.

* Mr. White asserts that there are three species of the willow wren, which differ in their size, and in their note. The yellowest bird is considerably the largest, and is distinguished by having its quills tipped with white. It haunts the tops of trees, and makes a sibilous noise like a grasshopper; at intervals it rises singing and shivering its wings. But it were rash to multiply species. This bird is much subject to variety in point of size and plumage; and its note must evidently depend on the season of the year.

THE GREAT YELLOW WREN.

WE are acquainted with another Yellow Wren, which is not so small by a fourth part as the preceding, and differs too by its colours: its throat is white, and there is a whitish streak across the eye: a rusty tint, on a whitish ground, covers the breast and belly: the same tint forms a broad fringe on the coverts and quills of the wings, of which the ground is blackish: a mixture of these two colours appears on the back and the head; in other respects, this bird has the same shape with the common Yellow Wren. It is found in Lorraine, whence it was sent to us; but as we are ignorant of its natural habits, we cannot decide with regard to the identity of these two species.

With respect to the *Great Yellow Wren*, which Brisson reckons, after Willughby, as a variety of the common kind, and which ~~has~~ *double the size*, it is difficult, if the matter is not exaggerated, to conceive that a bird of twice the bulk should belong to the same species. Probably Willughby mistook the sedge warbler for the Yellow Wren, which resembles it much, and is actually twice as large.

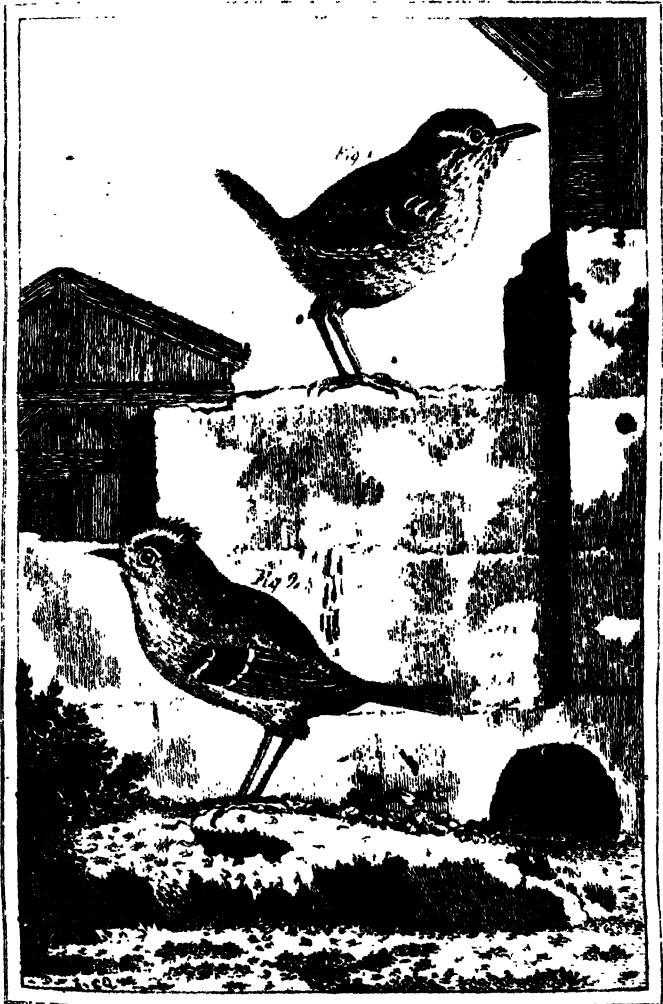


FIG 1. THE WREN, FIG 2. THE GOLD CROWNED WREN.

THE COMMON WREN*.

THE name *troglodytes*†, which the ancients bestowed on this little bird, denoted its inha-

* CHARACTER SPECIFICUS.

SYLVIA TROGLODYTES. S. grisea, superciliis albidis, alis nigro cinereoque undulatis.—*Lath. Ind. Orn.* ii. p. 547. No. 148,

MOTACILLA TROGLODYTES.—*Gmel. Syst.* i. p. 993.—*Raii Syn.* p. 80. A. 11.—*Will.* p. 164. t. 42.

REGULUS.—*Bris.* iii. p. 425. 24.

LE TROGLODYTE, ROITELET.—*Buff. Pl. Enl.* 651. f. 2.—*Buff. par Sonn.* 52. p. 161. pl. 149. f. 1.

WREN.—*Br. Zool.* i. No. 154.—*Arct. Zool.* ii. No. 322.—*Will. (Angl.)* p. 229. t. 42.—*Lath. Syn.* iv. p. 506. 143.—*Bew. Birds*, 1. p. 230.

HABITAT

in Europa, Asia, forte in America.

W.

† In Greek *Τροχιλος*, from *τροχος* a top, which comes from *τρεχω* to run, or whirl; also *Τρωγλοδυτης*, from *τρωγλη* a cave, or hole, and *δυμι* to enter: the Romans adopted these names, *Trochilus* and *Troglodytes*: in Italian, *Reuttino*, *Re di Siepe* (hedge-king): in Tuscany, *Stricciolo*: in Sicily, *Perchia Chagia*: in German, *Schnee-Koëmig*, *Winter-Koëmig*, *Zaun-Koëmig*, *Thurn-Koëmig*, *Meuse-Koëmig*, *Zoun Schlopflin*, (the snow, winter, hedge, thorn-king; the hedge-slipper): in Swedish, *Tumling*: in Polish, *Krolik*, *Pokrywski*, *Wolowe*

biting caves or caverns. The moderns have erroneously confounded it with the gold-crested wren: the latter resorts near our dwellings in winter: it emerges from the heart of bushes and thick boughs, and enters into little lodgements which it makes in the holes of walls. Aristotle discriminates it by this habit*, and selects other features, which it is impossible to mistake; and because of its gold crest, he terms it little king, or *regulus* (*roitelet*) †. But the *troglydytes*, or common wren, is so different both in its figure and in its economy, that the same name should never have been applied to it. Yet it is an error of ancient date, perhaps as early as the time of Aristotle †. Gesner has pointed it out §; but, notwithstanding his authority, supported by Aldrovandus and Wil-

Oczko: in Turkish, *Bilbil*: in Provence it is called *Vaque Petoué*, and *Roi-Bedelet*: in Saintonge, *Roi-Bouti*: in Sologne, *Roi-Berry*: in Poitou, *Quionquion*: in Guienne, *Arrepit*: in Normandy, *Rebetre*: in Anjou, *Berichon*, or *Roi-Bertaud*: in Orleanois, *Ratillon* or *Ratereau*, *Petit-Rat*: in Burgundy, *Fourre-Buisson* and *Roi de Froidure*.

* “The *trochilus* inhabits orchards and holes; is difficult to be caught, and elusive.”—*Arist. lib. ix. 2.*

† “The *tyrannus* (king), which is not much larger than a locust, has a flame-coloured crest, formed by a slight elevation of the plumage: in other respects it is beautiful, and sings sweetly.”—*Arist. Hist. Anim. lib. viii. 3.*

‡ “The *trochilus* is called also chief, or king; wherefore the eagle is reported to fight with it.”—*Id. lib. ix. 2.*

§ Wilfughby.

lughby, who clearly distinguish these birds *, other naturalists still persist in confounding them †.

The *troglydtes*, then, is that very small bird which appears in the villages and near towns on the approach of winter, and even in the coldest weather, having a clear, sprightly, little warble, particularly towards evening: it pops out on the top of piles of wood or bundles of faggots, and next moment glides into cover; or if it ventures out on the eaves of a house, it quickly hides itself under the roof, or in a hole of the wall; when it hops among the heaped branches, its little tail is always cocked. Its flight is short and whirling, and its wings beat so briskly, that their vibrations are not perceptible. Hence the Greeks called it *trochilus*, which is probably the diminutive of *trochus* ‡, a top; and this appellation not only refers to

* Turner, under the appellation of *trochilus*, describes the Common Wren; and Ætius gives a very accurate account of it, distinguishing it judiciously from the gold-crested wren.—See *Aldrovandus*, vol. ii. p. 655.

† Olina, Belon, Albin, and Brisson, term it *Regulus*: Frisch and Schwenckfeld, after having named it *troglydtes*, call it likewise *Regulus*: but Gesner, Aldrovandus, Johnston, Willughby, and Sibbald, reject the latter appellation, and adhere to that of *troglydtes*. Klein, Barrère, and Gesner himself, again apply to the gold crested wren the name of *trochilus*, which in Aristotle denotes evidently the Common Wren. Brisson copies their error.

‡ “*Trochilus* is derived from *trochus*, because of its top-like shape.”—Klein.

its mode of flying, but corresponds to its round compact form.

The Wren is only three inches nine lines long, and its alar extent five inches and a half; its bill six lines, and its legs eight: all its plumage is intersected transversely with little wavy zones of deep brown and blackish on the body and the wings, and even on the head and the tail: the under side of its body is mixed with whitish and grey: it is the plumage of the woodcock in miniature*. It weighs scarcely a quarter of an ounce.

This very small bird is almost the only one that continues in our climate till the depth of winter; and it alone retains its cheerfulness in that dreary season; it is always brisk and joyous; and, as Belon says, it is constantly gay and stirring†. Its song is loud and clear, and consists of short quick notes, *sidiriti, sidiriti*: it is divided by stops of five or six seconds. It is the only light and pleasant voice that is heard

* I have seen children who knew the woodcock call the Wren, the first time it was shewn them, a *young woodcock*.

† The expression used is *allègre & riante*, which, Buffon remarks, has lost its energy in the French language.

When it sings, it gives its tail a brisk little motion from right to left. It has twelve quills remarkably tapered; the outermost much shorter than the next, and this than the third; but the two middle ones are also longer than the adjacent one on either side; and this property is easily perceived, since the bird not only cocks its tail, but flies with it spread.

during that season, when the silence of the inhabitants of the air is never interrupted but by the disagreeable croaking of the ravens*. The Wren sings most when the snow falls †; or in the evening, when the cold threatens to increase the gloom of the night. It thus lives in the out-courts and in the wood-yards, searching among the faggots, on the bark, under the roofs, in the holes of walls, and even in pits, for chrysalids and dead insects. It frequents, too, the margins of perennial springs and brooks that never freeze, and shelters itself in the hollow willows. In such lodgments the Wrens sometimes gather in numbers‡: they often come out to drink, and return quickly to their common receptacle. Though familiar, and not disconcerted by near approach, they are difficult to catch: their smallness, and their nimbleness, enable them almost always to elude the eye and the talons of their enemies.

In the spring the Wren lives in the woods, where it builds its nest near the ground, among branches, or even on the turf; sometimes beneath the trunk of a tree, ~~on~~ a rock; or even under the shelving brink of a rivulet; sometimes in the thatched roof of some lone cottage in a wild retreat, and even on the hut of the

* Salerne.

† Id.

‡ A sportsman told me that he had often found more than twenty collected in the same hole.

charcoal-baker and wooden-shoe maker*, who are employed in the forests. For the construction the bird collects much moss, and of that material the outside is entirely composed; but within it is neatly lined with feathers. The nest is almost round, and externally it is so bulky and mishapen as to escape the robber's search; for it seems only a heap of moss rolled together by chance: there is only one little narrow aperture made in the side. The bird lays nine or ten dirty-white eggs†, with a zone dotted with reddish at the obtuse end. It will forsake, if it perceives that they are discovered. The young ones leave their lodgment before they are able to fly, and they run like little mice among the bushes‡. Sometimes the field-mice possess themselves of the nest: whether that the Wren has forsaken it, or that these intruders drive away the bird, by destroying the hatch§. We have not discovered that, in our climate, it breeds a second time during the month of August, as Albertus says in Aldrovandus, and as Olina avers to be the case in

* In French, *Charbonniers* and *Sabotiers*.

† Schwenckfeld and Aldrovandus.

‡ Gesner.

§ "I found this spring, in a thorn hedge, about five feet from the ground, a nest shaped like the Wren's, built of moss and wool. I was much surprised, upon tearing it, to observe in it five young field-mice. The nest had been built by the Wrens, and the mice had taken possession of it."—*Note of the Count de Querhoënt*.

Italy; adding that numbers are seen in Rome, and in its vicinity. The same author gives directions how to raise them, after they are taken from the nest; but, as Belon observes, it will be difficult to succeed, for the Wren is too delicate*. We have remarked that it is fond of the company of the redbreasts; at least it attends the call with these birds: it approaches, making a short cry *tirit, tirit*, which is of a deeper tone than its song, but equally like the sound of a clock-bell. It is so fearless and prying, that it even enters the window of the piper's lodge. It flutters and chants in the woods till dark, and, with the redbreast and blackbird, it is heard among the latest after sun-set†: it is likewise one of the earliest awake. It is not prompted, however, by the pleasures of society; for it prefers retirement in the love season, and the males pursue each other hotly‡.

The species is extensively spread through Europe. Belon says that it is common every where: however, if it endures our winters, it can hardly support the rigours of the north. Linnæus tells us that it is rare in Sweden. The names which it has in different countries

* "To raise it, we must keep it warm in the nest; give it often to eat, but little at a time, sheep's or calf's heart minced very small, and some flies. When it feeds alone, a little corner of the cage should be hemmed in with red cloth, to which the bird may retire at night."

† Turner.

‡ Belon.

suffice to distinguish it: Frisch calls it *king of winter hedges*: Schwenckfeld, *snow-king* (*Schneekoenig*): in some provinces of France it is termed *chill-king* (*roi de froidure*): one of the German names (*Zaun-Schlupfer*) alludes to its gliding into the hedges: and the old English expression, *dike smouler*, mentioned by Gesner, has the same import. The Sicilian appellation, *Perchia-chagia*, signifies *bush-borer*. In Orleans it is called *ratereau*, or *ratillon*, because it runs among the coverts like a young field-mouse: lastly, in some provinces it is called *ox* (*bœuf*), by way of antiphrasis, on account of its extreme smallness*.

This bird seems to have two representatives in the new continent: *the Wren of Buenos Ayres*, and *Wren of Louisiana*. The first is of the same size and plumage, only its colours are rather more vivid and distinct; and it may be regarded as a variety of the European kind. Commerson, who saw it at Buenos Ayres, mentions nothing of its habits, except that it is found on both banks of the river de la Plata, and that it even enters the vessels in pursuit of flies. The second is one-third larger than the first: its breast and belly are of a yellowish fulvous: there is a small white ray behind the eye: the rest of the plumage on the head, the back, the wings, and the tail, is of the same colour, and marbled, as in the Common Wren.

* Hebert.

Father Charlevoix commends the song of the Canadian wren, which is probably the same with that of Louisiana.*

Our author, on the authority of Aldrovandus and Gesner, says that it lays nine or ten eggs: but Linnæus, Pennant, and Latham, agree, that it lays from ten to eighteen. The Wrens continue in Britain the whole year. They are rare in Sweden and Russia, and never penetrate to Siberia.

The North American Wren, mentioned by Charlevoix, appears in the state of New-York about May, and breeds in June. It builds in holes of trees; its materials fibres and sticks, which it lines with hairs and feathers. It lays from seven to nine white eggs, with straggling spots of red. It retires southwards in August. It is twice as large as the ordinary Wren, and its note is different.

Virey makes a singular observation with respect to the Wren. He observes, that, notwithstanding this little bird can endure the greatest heats of summer, exposed to a scorching sun for several days without a drop of moisture, yet, when dead, it will be completely dried in forty-eight hours. Some insects also, which are never known to take liquid, become friable almost as soon as they are dead. W.

THE GOLD-CRESTED WREN * †.

THIS is the smallest of all the European birds. It passes through the meshes of com-

CHARACTER SPECIFICUS.

SYLVIA REGULUS. *S. virescens*, remigibus secundariis exteriori margine flavis, medio 'albis, vertice luteo.—*Lath. Ind. Orn.* ii. p. 548. No. 152.

MOTACILLA REGULUS.—*Gmel. Syst.* i. p. 995.

REGULUS CRISTATUS.—*Raii Syn.* p. 79. A. 9.—*Will.* p. 163. t. 42. — *Bris.* iii. p. 579. 17. — *Phil. Trans.* xxviii. p. 170.

LE ROITELET.—*Buff. Pl. Enl.* 651. 3.—*Buff. par Sonn.* lii. p. 177. pl. 149. f. 2.

GOLD-CRESTED WREN.—*Br. Zool.* No. 153.—*Arct. Zool.* ii. No. 321.—*Id. Sup.* p. 64.—*Will. (Angl.)* p. 227.—*Edw.* t. 254. 1.—*Lath. Syn.* iv. p. 508. 145.—*Bew. Birds,* i. p. 233.

HABITAT

per omnem orbem cognitum. — $3\frac{1}{2}$ pollices longa.—In Angliâ frequenter occurrit; in summitatibus maximarum arborum, præcipue quercuum, plerumque versatur. W.

† In Greek, Τεσσαρος: in modern Greek, Τεττιγών: in Italian, Fior Rancio (marygold flower), Occhio Borino (ox-eye), and Reattino, Reillo, Regillo (i. e. little king): in Verona, Capo d'Oro (gold head): in Genoa, Boarino della Stella (star rustic): in Bologna, Papazzino (little pope): in German, Gekroöntes (crowned bird), Koönigchen (kingling), Ochsen

mon nets; cages cannot confine it; and, if let loose in a chamber, the least crack will allow it to escape. When it visits our gardens, and glides among the hedge-rows, how quickly does it vanish from our sight! The smallest leaf is sufficient to conceal it. If we want to shoot it, we must use very fine sand: for the smallest lead shot would spoil the plumage. When we have succeeded in catching it, either with lime-twigs, with the titmouse trap, or with a very close net, we must be careful not to crush the delicate bird; and, as it is exceedingly nimble, we are not yet sure of securing it. It has a sharp shrill cry, like the whisper of the grasshopper, which is almost as large*. Aristotle says that it sings agreeably; but probably those who communicated that fact had confounded it with the common wren, especially as the philosopher himself acknowledges that the same name was sometimes applied to both birds. The female lays six or seven eggs, which are scarcely larger than peas: the nest is formed into a hollow ball, closely interwoven with moss and spiders' webs, lined with the softest down, and having an aperture in the side. It builds generally in the forests; sometimes on the ivies

Acuglein (ox-eye), *Holtz-Meisse* (wood-mouse): in Swiss, *Struessle*: in Flemish, *Konünrken*: in Polish, *Krolik*, *Czubaty*, *Sikora Lesna*: in Bohemian, *Ztotohtawek*: in Swedish, *Kongs-Vogel*: in Danish, *Fugle-Konge*: in Icelandic, *Rindill*.

* This song is not very harmonious, if Gesner heard it and understood it rightly; for he expresses it by *zul, zil, zalp*.

and elms of our gardens, or on the pines beside our houses *.

The smallest insects are the common food of these diminutive birds: in summer they catch these nimbly on the wing: in winter they seek the insects in their retreats, where they are torpid or dead. They also eat the *larvæ*, and all sorts of worms. They are so alert in discovering and seizing their prey, and at the same time such great epicures, that sometimes they continue to swallow till they are surfeited. During summer they feed on small berries and seeds, such as those of fennel; and they also scrape the earth under old willows, where they probably find something nutritious. I never could discover small pebbles in their gizzard.

The Gold-crested Wrens delight in oaks, elms, tall pines, firs, junipers, &c. In Silesia, says Schwenckfeld, they are seen both during the summer and the winter, and always in the forests. In England they inhabit the mountain woods. In Bavaria and Austria they resort in winter near the towns, where they find resources for the severity of the season. It is said even that they fly in small flocks, which are composed not only of their own species, but of other birds which have the same modes of life, such as the creepers, the nuthatches,

* Lord Trevor found one of these nests in his garden on an ivy. Dr. Derham remarks that these birds breed every year on the firs before his house, at Upminster, in the county of Essex.—*Willughby*.

and the titmice, &c.* On the other^d hand, Salerne informs us that, in Orleanois, they appear generally in pairs during the winter, and call upon each other when they are separated. It would seem, therefore, that they have different habits in different countries; which is not impossible, since habits depend on circumstances: but it is more likely that the authors have committed some oversight. In Switzerland, it is uncertain whether they continue through the winter: at least, in that country, and in England, they are the last to disappear †. In France they are oftener seen in the autumn and winter than in the summer; and there are many provinces where they seldom or never breed.

These little birds are very agile and active: they are almost continually in motion, fluttering from branch to branch, creeping on the trees, and clinging indifferently in every situation, and often hanging by the feet, like the titmice; ferreting in all the cracks of the bark for their diminutive prey, or watching it as it creeps out. In cold weather they lodge in the evergreens, feeding on the seed; and often they perch on the summit of these trees: but in this habit they appear not to shun the presence of man, since, on other occasions, they suffer him to get very near them. In autumn

* Gesner, Klein, and Catesby.

† British Zoology.

they are fat, and their flesh is delicate: during that season they are commonly caught by means of the call. The public markets of Nuremberg are then well stocked with these little birds.

The Gold-crested Wrens are spread not only through Europe, from Sweden to Italy, and probably as far as Spain, but also to Bengal: and even in America they inhabit the extent between the Antilles and the north of New England, according to Edwards*. It appears therefore that these birds, which visit the northern countries indeed, but which fly to short distances, have migrated from the one continent to the other; and this well-ascertained fact is a proof of the proximity of the two continents in the high latitudes. If this be admitted, it would follow that the Gold-crested Wren, though apparently feeble and delicate, can not only bear cold, but endure all the vicissitudes of temperature.

The most remarkable part of its plumage is its beautiful aurora gold crown, bordered with black on each side, and which it conceals under the other feathers by the contraction of the muscles of the head: a white ray, which passing over its eyes, joins the black edging of the crown, and another black streak, in which the

* It must have penetrated much farther, if it be really found in the *Terra Magellanica*, as asserted in the *Navigations aux Terres Australes*, t. ii. p. 38. But we cannot infer that the bird here meant is the same with the Gold-crested Wren.

eye is placed, give a more marked physiognomy : the rest of the upper side of the body, including the small coverts of the wings, is of an olive yellow : all the under side, from the base of the bill, is light rufous, verging to olive on the sides : the circumference of the bill is whitish, and projects some black bristles : the quills of the wings are brown, edged exteriorly with olive-yellow : this border is interrupted, near the third of the quill, by a black spot on the sixth, and more or less on the following quills as far as the fifteenth : the middle coverts, and the great coverts next the body, are edged with olive-yellow, and tipped with dirty-white, which produces two spots of the same dirty-white on each wing : the quills of the tail are dun-grey, edged with olive : the ground colour of the feathers is blackish, except on the head, at the rise of the neck, and on the lower part of the thighs ; the iris chestnut, and the legs yellowish. In the female the crest is of a pale yellow, and all the colours of the plumage are more dilute, as usual.

The Pennsylvanian Gold-crested Wren, is distinguished from this only by slight shades, which are insufficient to constitute even a variety. The greatest difference lies in the colour of the legs, which are blackish.

Brisson says, that in the Gold-crested Wren, the first feather of each wing is extremely short : but this is not a quill, its shape is different, it is not inserted in the same manner, nor is it

destined for the same use : it rises from the end of a sort of nail which terminates the bone of the wing ; and a similar feather sprouts from another sort of nail, at the succeeding articulation*.

† The Gold-crested Wren weighs from ninety-six to one hundred and twenty grains.—Total length three inches and a half ; the bill five lines ; it is black, the edges of the upper mandible are scalloped near the tip, and the lower mandible is a little shorter : each nostril is seated near the base of the bill, and covered by a single feather, which hangs over it with long stiff filaments ; the *tarsus* seven lines and a half ; the outer toe connected to the middle one by its first two *phalanxes* ; the hind nail almost double the rest ; the alar extent six inches ; the tail eighteen lines, consisting of twelve quills, of which the two intermediate and the two outer ones are shorter than the rest ; so that the tail is divided into two equal parts, both tapered : the wings measure six lines : the body, when plucked, is not an inch long.

The tongue cartilaginous, terminated by small filaments ; the *œsophagus* fifteen lines, dilating and forming a small glandulous sac before it is inserted into the gizzard ; the gizzard is muscular, lined with an inadhesive membrane,

* We may extend this remark to many other species of birds, which have been said to have the first quill of the wing extremely short.

and covered by the liver : the intestinal tube five inches : there is a gall-bladder; no *cæcum**,

* It is pretty frequent in England, on the summits of lofty trees, particularly oaks. It lays from six to eight eggs, which are white, sprinkled with minute dull-red spots. "The "Gold-crested Wren," says the accurate Mr. Pennant, "crosses annually from the Orkneys to the Shetland isles : "where it breeds, and returns again before winter; a long "flight, of sixty miles, for so small a bird."

It is the least of the British birds, weighing only seventy-six grains.

W.

VARIETIES of the GOLD-CRESTED WREN*.

1. THE RUBY-CROWNED WREN.—I cannot help considering this Pennsylvanian bird as a variety in point of size of our Gold-crested Wren. In fact, its crest differs little either in shape or colour, being rounder indeed, and of a purer and deeper red, emulating the lustre of the ruby, and not edged with a black zone. Also the upper side of the body is olive, which is deeper on the fore parts, and lighter on the rump, without any mixture of yellow: there is a tint of yellow on the lower part of the body, and deeper on the breast. But the greatest

* CHARACTER SPECIFICUS.

SYLVIA CALENDULA. S. cinereo-virens, linea verticali rubini colore, abdomine alisque subtus flavescentibus. — *Lath. Ind. Orn.* ii. p. 549. No. 154.

MOTACILLA CALENDULA. — *Gmel. Syst.* i. p. 994.

CALENDULA PENNSYLVANICA. — *Iris.* iii. p. 584. 18.

LE ROITELET RUBIS. — *Buff. par Sonn.* lii. p. 190.

RUBY-CROWNED WREN. — *Arct. Zool.* ii. No. 320. — *Edw.* t. 254. f. 2. — *Lath. Syn.* iv. p. 511. 146.

HABITAT

in America septentrionali. — 4½ fere pollices longa.

W.

difference consists in the size, it being larger and heavier than the common Gold-crested Wren in the proportion of eleven to eight. For the rest, the only difference consists in a few shades of the plumage: I speak of the dried specimens, for the habits and economy of the Ruby-crowned Wren are entirely unknown; and if ever these be discovered to be the same with those of our Gold-crested Wren, the identity of the species will be completely established.

In the Ruby-crowned Wrens, the crown is peculiar to the males, and not the least trace of it can be found on the head of the female. However, the plumage is nearly the same in both, and their weights are exactly equal.

Total length, four inches and a quarter; the bill, five lines and a half; the alar extent, six lines and a half; the *tarsus*, eight lines; the middle toe six; the tail eighteen, and consists of twelve quills; it exceeds the wings about half an inch.

To this variety we may refer the bird which Lebeau found in Louisiana, in which the back of the head bears a sort of crimson crown. The measures are indeed a little different, but insufficient to constitute a new variety, and the more so, as in other respects the birds are analogous, and inhabit the same climate.

Total length, four inches and a half; the bill six lines; the tail twenty-one lines, and exceeds the wings by eight or nine lines.

II. THE RED-HEADED WREN*.—This bird was seen by Kolben at the Cape of Good Hope; and though that traveller has not described it completely, we may gather from his account that, first, it is a variety of *climate*, since it is peculiar to the southern extremity of Africa: secondly, it is a variety of *size*, since, according to Kolben, it is larger than our blue titmouse: thirdly, it is a variety of *plumage*, for its wings are black, and its legs reddish; in which respect it differs considerably from our Gold-crested Wren.

III. This is the place which we ought to assign to the bird sent from Greenland to Muller, under the name of *the Scarlet-crowned Blue Titmouse* †, which is all he says of it.

* PARUS GRISEUS.—*Lath.*

† *Zoologiæ Dan. Prodrömus*, No. 284. May not this be the *Auua Tytlingr* of the Icelanders?

THE TITMOUSE WREN

THIS species, which is found in Cayenne, forms, by its short bill, the intermediate gradation between the gold-crested wren and the titmice. It is still smaller than the gold-crested wren: it inhabits a hot climate; whereas that bird prefers the more temperate countries, and even appears only in winter. The titmouse wren lodges in the bushes in the dry savannas, and consequently near dwellings. It has a jonquil crown on its head, but placed farther back than in the European bird; the rest of the head is greenish-brown; the upper side of the body, and the two middle quills of its tail, greenish; the lateral quills, the superior coverts of the wings, and their middle

* CHARACTER SPECIFICUS.

SYLVIA ELATA. *S. cristata virescens, subtus cinereo-albida, occipite crissoque pallide flavo, tectricibus alarum margine rectricibusque lateralibus apice albis.*—*Lath. Ind. Orn.* ii. p. 549. No. 153.

LE ROITELET MESANGE.—*Buff. par Sonn.* lii. p. 195.

LA MESANGE HUPPE'E de CAYENNE.—*Pl. Enl.* 708. 2.—*Lath. Syn.* iv. p. 510.

HABITAT

in Cayenæ uliginosis, inter fruticeta.

W

quills, brown edged with greenish, and the great ~~ones~~ ^{ones} brown, without any border; the throat, and the fore part of the neck, light cinereous; the breast and the belly greenish; the lower belly, the inferior coverts of the tail, and the sides, dilute yellow.

Total length, three inches and a quarter; the bill four lines (it appears much shorter than that of the gold-crested wren); the *tarsus* six lines, and black; the hind nail the strongest of all; the tail fourteen lines, consisting of twelve equal quills, and exceeds the wings ten lines.

THE TITMICE *†.

THOUGH Aldrovandus has restricted the word *parra* to the gold-crested wren, I conceive that Pliny employed it to signify in general the titmice, and that he regarded this genus as a branch of the family of woodpeckers, which he accounted more extensive than is admitted by the modern naturalists. My reasons are as follow :

1. Pliny says, that the woodpeckers are the only birds which breed in hollow trees ‡; and

* PARUS.

CHARACTER GENERICUS.

Rostrum validiusculum, integerrimum, subcompressum, basi setis tectum.

Lingua truncata, setis terminata.

Pedes ambulatorii, digitis ad imum fissis, postico valido.

† In Greek the Titmouse is named *Αργισζαρος*, Arist. Hist. Anim. lib. viii. 3: in Latin *Parra*.—Plin. Nat. Hist. lib. x. 33: in modern Latin, *Parus*, *Parix*, *Mesanga*. In Italy it is called *Parula*; and in some districts *Parizola*, *Patascio*, *Parroze*, *Zinzin*, *Orbesina*, *Sparuoczolo*: in Savoy, *Mayenche*: in Germany, *Mayss*, *Meysslin*. The English *Titmouse* has the same derivation, and probably, as Ray conjectures, alludes to the bird's nestling in holes of walls like mice.

‡ *Pullos* educant in cavis avium soli.—Lib. x. 18.

it is well known that many species of Titmice do the same.

2. All that he says in regard to certain woodpeckers, that they climb the trees like cats, that they hang with their heads downward, that they seek their food beneath the bark, that they strike it with their bill, &c. agrees equally with the Titmice and the woodpeckers *.

3. The account which he gives of other woodpeckers that suspend their nest from the end of young branches, to prevent any quadruped from approaching it †, will only suit some kinds of Titmice, such as the penduline and the Languedoc, and not at all the woodpeckers properly so called.

4. We scarcely can suppose, that Pliny never heard of the penduline and Languedoc Titmice, since one of them at least breeds in Italy; and it is equally improbable that, being acquainted with this fact, he would omit to insert it in his Natural History. But the passage alluded to is the only one that applies to these birds; and they must therefore have been included in the family of woodpeckers.

Moreover, the appellation of *parrae* ‡ seems

* Scandentes in subrectum felium modo; illi vero & supini percussi corticis sono, pabulum subesse intelligunt.—*Plin. lib. x. 18.*

† Picorum aliquis suspendit in surculo (nidum) . . . ut nullus accedere possit.—*Lib. x. 33.*

‡ In genere parrarum est, cui nidus ex musco arido ita absoluta perficitur pila, ut inveniri non possit aditus.—*Plin. lib. x. 33. See Belon, p. 343.*

to have been peculiarly bestowed on this branch of the woodpeckers ; for in the genus of *parrae*, says Pliny, there are some which form their nest of dry moss into a ball, and shut it so closely that the aperture can scarcely be found. This applies to the common wren, which has been sometimes confounded with the gold-crested wren and the Titmice. There is another species which builds in the same manner, only employing hemp and flax for the materials ; and this is the property of the long-tailed titmouse. Since the name *parrae* therefore comprehended many species, and the account of these agrees with the qualities of the Titmice, it will follow that the genus is really that of the Titmice. This idea is the more probable, as the epithet *argatilis*, which is given by Pliny to one of these species, is so like the Greek name *aigithalos*, which Aristotle applies to the Titmice, that we cannot help regarding it the same, only somewhat altered in transcription. Besides, Pliny uses the word *aigithalos* in no other part, though he was well acquainted with Aristotle's works, and had consulted them expressly in composing his tenth book, which treats of these birds. I may add, that the term *argatilis* has never, as far as I know, been applied by authors to any other bird but the one just mentioned, and there is every reason therefore to conclude that it is a Titmouse.

The Titmice have also been confounded with the bee-eaters, because they are both *apivorous* :

they have been confounded too with the goat-suckers, on account of the resemblance of the Greek names *αρισταλας* * and *αργοθηλας*, though Gesner suspects they are distinct in their etymology: besides, the Titmice have never been accused of milking the goats.

All the birds of this tribe appear feeble, because they are very small: but they are at the same time lively, active, and bold: they are perpetually in motion; they flutter from tree to tree; they hop from branch to branch; they creep along the bark; they climb the sides of walls; they suspend themselves in all situations, and often their head downwards, in order to dig in every little cranny, and pick out the worms, the insects or their eggs. They also feed on seeds; but instead of breaking these in their bill, like the linnets and the goldfinches, almost all the Titmice hold them under their little claws and peck them: they also pierce hazel nuts and walnuts, &c. †. If a nut be suspended at the end of a thread, they will cling to it, follow the oscillations, and without quitting their hold they will continue to peck it. It has been observed that the muscles of their neck are very strong, and those of the

* *Αρισταλας* is commonly reckoned a primitive word, and *αργοθηλας* is compounded of *αιξ*, a goat, and *θηλα* a nipple. T.

† As this exercise is rather laborious, and, according to Frisch, brings on blindness, it is advised to break the nuts and hampseed, in short, every hard substance given to them.

head thick* ; which accounts in part for their manœuvres: their other motions imply great force in the muscles of the legs and toes.

Most of the European Titmice occur in our climate at all seasons ; but they are never so numerous as about the end of autumn ; when those which live during the summer in the forests or on the mountains† are driven, by the cold and snows, from their retreat, and descend, in quest of food, into the cultivated plains, and near habitations‡. During all the winter months, and even in the beginning of the spring, they subsist on dry seeds and on fragments of insects which they find by ferreting the trees. They also crop the opening buds, and eat the caterpillar's eggs, particularly those which are seen round the small branches ranged like a series of rings, or the wreaths of a spiral. Lastly, they search in the fields for small dead birds, or such as are exhausted by disease, or entangled in snares, and, in short, all those incapable of resistance, though of their own species ; they pierce their skull, and feed upon the brains. Nor is this cruelty palliated by

* See *Journal de Physique*—Août 1776, p. 123; &c.

† The long-tailed titmouse, according to Aristotle ; the ox-eye, the little blue, the black, and the crested titmice, according to the moderns.

‡ Some pretend that they retire then into the fir-woods ; others assert, that they only make transient visits to the snowy countries, and advance towards the south. The latter opinion seems to be the most probable.

want; for they are guilty of it even in voleries, where they are abundantly supplied. In summer they eat not only almonds, walnuts, insects, &c. but all sorts of nuts, chesnuts, beech-mast, figs, the seeds of hemp, of panic, and other small seeds*. It is observed that those bred in the cage are fond of blood, tainted meat, rancid fat, and tallow melted, or rather burnt, by the flame of a candle. It would seem that the state of domestication vitiates their taste.

In general, the Titmice, though tainted with ferocity, love the society of their equals, and unite in numerous flocks: if they are parted by any accident, they mutually call on each other, and soon re-assemble. However, they seem to shun an intimate connection†: judging, no doubt, of the dispositions of others by their own, they feel that they cannot confide much in them: such is the society of rogues. The unions which they annually form in the spring are of a closer nature, and are very productive. No genus of birds is so prolific as that of the Titmice‡, and it is more remarkable the smaller they are. We might suppose that a greater proportion of organic matter enters into

* Some pretend that the Titmice cannot digest the seeds of rape or of millet, though these be softened by boiling; yet M. de Querhoënt, who raised some of these birds, assures me that he fed them only with hemp-seed and millet.

† Journal de Physique, Août 1776, p. 123, &c.

‡ So well known is this fact in England, that it is usual to call a little prolific woman a titmouse.

their structure, and from this exuberance of life results their fecundity, and also their activity, strength, and courage. No birds attack the owl with such intrepidity: they are ever the first to dart on the nocturnal foe, and they aim constantly at the eyes: their action is attended with a swell of the feathers, and with a rapid succession of violent attitudes and rapid movements, which powerfully mark the bitterness of their rage. When they are caught, they bite keenly the finger of the bird-catcher, strike furiously with their bill, and invite, by their loud screams, the other birds of their species, which also fall into the snare, and in their turn decoy others*. Lottinger affirms that, in the mountains of Lorraine, when the weather is foggy, forty or fifty dozens may be caught in a morning † with no apparatus but a call, a small tent, and a cleft stick. They may also be ensnared with various gins; with the trap ‡, with the noose, with lime twigs, or

* *Journal de Physique*, Août 1770, p. 123.

† According to Frisch, only a hundred are caught in a day by a sort of sport in the neighbourhood of Nuremberg. This is performed by means of a triangular lodge, fixed on three large firs that serve as columns; each face of this lodge has a sort of window, in which is set a trap, with its decoy bird. The bird-catcher himself keeps in the centre, and sounds a loud call.—*Frisch*, t. 1. class 2. This author adds, that scarcely any are caught in the traps but crested and long-tailed titmice.

‡ There are cage-traps, and those made with elder and two tiles laid one against another, with a head of corn between them; the hurdle, &c.

with a small lark-net: or they may be intricated, as the ancients practised, with meal soaked in wine*. Such are the numerous methods of destroying these small birds, and almost all of these are successfully employed. The reason is, that people who keep bees suffer much from the Titmice, which make great havoc among these useful insects, especially when they have young†. Their extreme vivacity drives them into every kind of snare, especially on their arrival; for at that time they are very tame; they lodge in the bushes, and flutter about the roads, allowing one to get near them; but afterwards they gain some experience, and become rather more shy.

They lay about eighteen or twenty eggs‡: some deposit these in the holes of trees, which they round and smooth with their bill, and fashion them internally into the proper form; others lay them in ball-shaped nests, which are of a magnitude very disproportioned to

* This paste occasions giddiness; they tumble, make efforts to fly, again fall over, and amuse the spectators by the strange variety of their motions and gestures.—*Alianus de Nat. Anim.* lib. i. 58.

† Others say, that winter is the time when these birds destroy the most, because the bees, being then less infected, are not so formidable with their stings, and are more easily caught.

‡ A female, says Hebert, that was caught on her eggs, had the skin of her belly so loose, that it would have covered the belly entirely, though the bird had been made as large.

so small a bird. We might almost suppose that they previously reckon the number of the eggs; and that they anticipate the affection to their expected offspring: Hence their precautions used in constructing the nest; the solicitude which some species discover in suspending it from the end of a branch, and the attention in selecting the proper materials, such as slender grass, small roots, moss, thread, hair, wool, cotton, feathers, down, &c. They are able to provide subsistence for their numerous family, which implies not only indefatigable activity, but much address and skill. They are often seen returning with caterpillars in their bill. If other birds attack their progeny, they will make an intrepid defence; will dart on the enemy; and courage renders their weakness formidable.

All the Titmice have white spots round the eyes: the outer toe is joined, at its origin, to the middle toe, which is a very little longer than the hind toe: the tongue seems truncated, and terminated by filaments: almost all of them are thickly feathered on the rump: in all, except the blue one, the head is black, or marked with black; in all, except the long-tailed one, the legs are lead-coloured: but what more particularly characterises the birds of this family, is, that the bill is not awl-shaped, as some systematic writers assert, but formed like a short cone, a little flattened on the sides; it is stronger and shorter than that of the *Junco*.

vettes, and often shaded by the feathers of the forehead, which rise and bend forward: their nostrils are covered with other smaller and fixed feathers; and their economy and habits are also similar.

It may be worth remarking, that the Titmice bear some analogy to the ravens, the magpies, and the shrikes, in regard to the comparative force of their bill and their little talons, in their mustachoes round the bill, in their appetite for flesh, in their manner of tearing their food into morsels before they eat; and even, it is said, in their cries, and in their mode of flying: but still we ought not to refer them to the same genus, as Kramer has done. We need only to compare these birds, to see them creeping on the trees, to examine their external shape and their proportions, and to reflect on their prodigious fecundity, and we shall be convinced that the Titmice are widely different from the ravens. Besides, though the Titmice fight among themselves, and sometimes devour each other, particularly, certain species which discover a "violent antipathy"; they sometimes live on good terms with one another, and even with birds of other species; and we may assert that they are not radically ~~so~~ cruel as the

* Such are the ox-eye and the pinnaceous qu. See *Journal de Physique*, Août 1776. It is also said, that if several Titmice be successively put in the same cage, the one first domesticated will attack the new comers, will dominate over them, and will endeavour to kill them and suck their brains,

shrikes, and only apt to be transported by momentary passion, in certain circumstances which are little known. I have witnessed a case, where, far from taking advantage of their strength, when no resistance could have been made, they shewed themselves susceptible of pity and affection. I put two young black Titmice, taken from the nest, in a cage, where was a blue Titmouse: she adopted them, and treated them with the tenderness of a mother; shared her food with them, and even was attentive to break the seeds mixed with it when too hard. I much doubt if a shrike would have treated them so kindly.

These birds are spread through the whole of the ancient continent, from Denmark and Sweden to the Cape of Good Hope, where Kolben saw six species, viz. the great titmouse; the marsh titmouse; the blue, the long-tailed, the black-headed titmice; and the gold-crested wren, which he took for a titmouse. "All these kinds sing pleasantly," says this traveller, "and like canary finches, with which they mix to form magnificent savage concerts*." Our bird-fanciers pretend that those of Europe also sing well; but this must be understood of their vernal song, which is the music of love, and

* I own that I lay little stress on this observation, in which Kolben, instead of relating what he saw, seems to copy what he read in naturalists; only taking the liberty to assert that the Titmice sing like canaries, while these authors compare their song rather to that of the chaffinches.

not of the disagreeable harsh cry, which they retain throughout the year, and which has procured them, it is said, the name of *locksmith* *. These connoisseurs add, that they can be taught to whistle airs: that the young ones which are caught after they are partly grown, succeed better than those fed artificially †: that they soon grow tame, and begin to sing in the course of ten or twelve days: lastly, that they are very subject to the cramp, and ought to be kept warm during winter.

Almost all the Titmice, whether they enjoy the state of liberty, or be confined in a volery, form deposits for their provisions. The Viscount Querhoënt observed several, whose wings he had clipped, take in their bill three or four seeds of panic, and a seed of hemp ‡, and scramble with remarkable agility to the top of the tapestry, where they had placed their magazine. But it is obvious, that this instinct of storing proceeds from avarice, and not foresight; at least in the case of those which

* I do not agree with authors on this point; for the name of *locksmith* (*serrurier*) has been given to the woodpeckers, not because of their cry, but on account of the grating noise made by striking the trees with their bill. It seems to me more probable that, as the Titmice have the same habit, they have for a like reason received the same name.

† *Traité du Serin*, p. 51. Every body agrees that the young Titmice, taken from the nest, are difficult to raise.

‡ Frisch says nearly the same thing of the *cinquiesme* or marsh titmouse.

usually spend the summer in the mountains, and subsist during winter in the plains. It has also been observed, that they constantly seek the darkest spots in which to repose: they would even seem to strive in hollowing out recesses in the boards or the wall; and these attempts are always at a certain height; for they seldom rest on the ground, and never remain long at the bottom of the cage. Hebert took notice of some species which passed the night in hollow trees: he perceived them several times dart briskly into their lodgment, after they had previously glanced round, and, as it were, examined the ground: he tried to drive them out by pushing a stick into the same hole by which they entered, but without effect. He supposes that they return every day to the same roost; which is the more probable, since this also contains their little store of provisions. These birds sleep soundly, with their head concealed beneath their wings, as others. Their flesh is in general lean, bitter, and dry, and consequently very bad food; however, there are some exceptions*.

The largest of all the Titmice are, among the European kinds, the great and bearded titmice; and among the foreign kinds, the blue titmouse of India, and the toupet titmouse of

* Geffler says, that they are eaten in Switzerland; but he adds, that they are by no means pleasant food.—Schwenckfeld also asserts, that their flesh is neither dry, nor ill tasted, in autumn and in winter.

Carolina ; each of these weighs near an ounce. The smallest of all are the black-headed titmouse, the long-tailed titmouse, the marsh titmouse, the penduline titmouse, and the crested Carolina titmouse ; which exceed not two or three gros.

We shall begin the particular history of the different species with those of Europe, attending to the characteristic properties of each ; and we shall then treat of the foreign kinds. We shall compare these with the European, and mark the analogies that occur ; and we shall exclude such as have been inaccurately referred to the genus.

THE GREAT TITMOUSE, or OX-EYE*.

I KNOW not what induced Belon to assert that " this species does not hang so much from

* CHARACTER SPECIFICUS.

PARUS MAJOR †. P. viridi-olivaceus, subtus flavescens, capite nigro, temporibus albis, nucha lutea.—*Lath. Ind. Orn.* ii. p. 502. No. 1.

PARUS MAJOR.—*Gmel. Syst.* i. p. 1006.—*Rapin Syn.* p. 73. A. 1.—*Will.* p. 174. t. 43.—*Bris.* iii. p. 539. 1.

LA GROSSE MESANGE, ou CHARBONNIERE.—*Buff. Pl. Ent.* 3 f. 1.—*Buff. par Sonn.* lii. p. 218. pl. 149. f. 3.

GREAT TITMOUSE, or OX-EYE.—*Br. Zool.* i. No. 162.—*Arct. Zool.* ii. p. 425. A.—*Will. (Angl.)* p. 240. t. 43.—*Lath. Syn.* iv. p. 536. 1.—*Bew. Birds,* i. p. 216.

HABITAT

in Europe, Africa, Asia; in Anglia circa arbores frequens. in quarum cavitatibus nidificat. W.

† In Italian, *Parisola Domestica*: in Rome, *Spernuzzola*. in Lombardy, *Parussola*: in Bologna, *Poligolar* in Tuscany, *Cincupotola*: in German, *Spiegel-meiss* (mirror titmouse), *Brundt-meiss* (fire titmouse), *Kohlmeiss* (coal titmouse): in Dutch, *Coelmaes*: in Swedish, *Talg-Oxe*: in Danish, *Musvit*: in Norwegian, *Kiod-meise*. In different parts of France it is called *Nonnette*, *Moinoton*, *Moncau de Bois*, *Mesange Brûlée*, *Crete Chassis*; which names refer to its dark colour, and its habits of making holes.

the branches as the others;" for I had occasion to observe one which continually suspended itself from the bars of the upper part of its cage; and, happening to sicken, it still clung to these with its head turned downwards, and continued in this pendent situation during the whole of its illness, and even after its death.

I have also learned from experience, that the Ox-eye kept in the cage sometimes cleaves the skull of the young birds that are presented to it, and feeds greedily on the brain. Hebert ascertained nearly the same fact by an experiment which he made: he put a redbreast in the same cage with eight or ten Ox-eyes, about nine in the morning: and against mid-day the skull of the redbreast was bored, and the brain entirely eaten. On the other hand, I have seen many Ox-eyes, and other titmice, which had been caught by means of the call, that lived above a year in the same volery, without any act of hostility: and at this very moment, there is an Ox-eye which has lived six months on good terms with goldfinches and siskins; though one of the siskins was sick during that period, and, in its feeble state, incapable of resistance, offered an easy prey to voracity.

The Great Titmouse inhabits the mountains and the valleys, among the bushes and the copses, in the vineyards and the forests: but M. Lottinger assures me that they prefer the mountains. The ordinary cry of the male,

which it retains through the whole year, and which is most frequent in the evening preceding rain, resembles the grating of a file, or the grinding of a bolt; and hence, it is said, the appellation of *locksmith*. In spring, however, it assumes another modulation, and becomes so pleasant and varied, that we could hardly suppose it to proceed from the same bird. Frisch, Guys, and several others, compare it with that of the finch*; and hence perhaps the reason of the name *finch titmouse*, which has been given to this species. Olinia allows that the Ox-eye excels all the other titmice in singing, and as a call bird. It is easily tamed, and grows so familiar as to eat out of the hand: it is dexterous at the little trick of drawing up the pail, and it even lays while in captivity.

When these birds enjoy their natural freedom, they begin to pair about the first of February: they make their nest in the hole of a tree or wall†: but they consort a long time be-

* This bird is kept in the cage in certain countries, says Aldrovandus, for the sake of the pleasant ~~warble~~ which it has the whole year. On the other hand, Turner says, that its vernal song is not agreeable, and that the rest of the year it is mute. According to some, it seems to sound *titigu, titigu, titigu*, and in the spring *stiti, stiti*, &c. In general, authors often erect their local observations into universal axioms; and sometimes they barely repeat what they have heard from persons little informed: and hence the contradictions.

† Particularly in the walls of lone houses, near forests:

fore they construct it, and they select the softest and the most downy materials. They commonly have eight, ten, or even twelve eggs, with rufous spots, chiefly at the large end. The period of incubation exceeds not twelve days: the young brood continue several days blind: they are soon covered with a thin slender down, which adheres to the end of the feathers, and drops off as these grow. They fly in the space of fifteen days; and it has been observed that their growth is more rapid in rainy seasons. After they have once quitted the nests, they return no more, but perch on the neighbouring trees, and incessantly call on each other*: they continue thus in a body, till the approach of spring invites them to pair. The nestlings are found till the end of June, which shows that the Ox-eyes have several hatches. Some say that they have three: but is it not when they are disturbed in the first hatch that they begin a second, &c.? Before the first moulting the male may be distinguished, since he is larger, and of a hotter temper. In the ~~space~~ of six months the young are all full grown, and four months after moulting they are fit for breeding. According to Olin, *these birds live only five years; and others men-*

for instance, those of charcoal makers (*charbonniers*); whence, according to some, the titmouse has the name of *charbonniere*.

* It is perhaps an effect of this early habit, that the titmice run so nimbly when they hear the voice of their fellows

tion that age as the time when they begin to be afflicted with defluxion of the eyes, the cramp, &c. But they lose their activity without losing the harshness of their character, which is aggravated by their infirmities *. Linnæus says, that in Sweden they lodge on alders, and that in summer they are very common in Spain.

The Great Titmouse has on its head a sort of cowl of a bright glossy black, which before and behind descends to the middle of the neck, and has on each side a large white spot, almost triangular: below this cowl rises before a long narrow black bar, which extends across the middle of the breast and belly to the extremity of the inferior coverts of the tail: these are white, and also those of the lower belly: the rest of the under surface of the body, as far as the black on the throat, is of a light yellow: an olive-green prevails on the upper side of the body, but becomes yellow, and even white, as it approaches the lower edge of the cowl: it grows dusker, on the contrary, at the opposite side, and changes into a blue-ash colour on the rump and the superior coverts of the tail: the first two quills of the wing are of a brown-cinereous, without edgings: the rest of the great quills are bordered with blue-ash, and the middle ones with olive-green, which assumes a yellow tinge on the last four: the wings have a

* Journal de Physique, Août 1776.

transverse ray of yellowish - white : all that appears of the quills of the tail is blueish-cinereous, except the outermost, which is edged with white, and the next, which is tipped with the same colour : the ground of the black feathers is black, and of the white ones white : that of the yellow ones is blackish, and that of the olive ones cinereous. The bird weighs about an ounce.

Total length six inches ; the bill six lines and a half ; the two mandibles equal ; the upper one has no scalloping : the *tarsus* nine lines ; the hind nail the strongest ; the alar extent eight inches and a half ; the tail two inches and a half, somewhat forked, consisting of twelve quills, and exceeds the wings eighteen lines.

The tongue is not fixed and immoveable, as some have supposed* : the bird can push it forward and raise it parallel to itself, with a moderate declination to the right and left ; and consequently it is susceptible of all the motions that can be compounded of these three : it is truncated at the end, and terminated with three or four filaments. Frisch supposes, that the Great Titmouse uses these to taste its food before eating.

The *asophagus* two inches and a half, forming a small glandulous sac before its insertion into the gizzard, which is muscular, and lined

with a wrinkled inadhensive membrane. I found in it small black seeds, but not a single pebble: the intestines six inches four lines; two vestiges of a *cæcum*; a gall bladder*.

* A variety of this bird was killed at Feversham in Kent: its colours were in general more obscure, its bill was very long, and its mandibles bent at the tips. The Ox-eye occurs in the northern extremities of Europe, of Asia, and even of America: it is a permanent settler. Its egg is white, with numerous rufous spots.

THE COLEMOUSE*†.

THE name of black-head (*atricapilla*, *μελαγχέρυφος*) has been applied to several birds, such as the black-cap, the bulfinch, &c. But the black-head of Aristotle appears to be a titmouse; since, according to him, it lays seventeen, or even twenty-one eggs, and has besides all the properties of the titmice, such as nestling in trees, feeding on insects, having a truncated tongue, &c. What this author adds from report, and which Pliny confidently repeats, that the eggs are always odd, is founded on the no-

* CHARACTER SPECIFICUS.

PARUS ATER. P. dorso cinereo, capite nigro, occipite pectoraque albo.—*Lath. Ind. Orn.* ii. p. 564. No. 8.

PARUS ATER.—*Gmel. Syst.* i. p. 1009.—*Raii Syn.* p. 73. A. 2.—*Will.* p. 175. t. 43.

PARUS ATRICAPILLUS.—*Bris.* iii. p. 551. 5.

LA PETITE CHARBONNIERE.—*Buff. par Sonn.* lii. p. 229.

COLEMOUSE.—*Br. Zool.* i. No. 164. t. 57. f. 3.—*Arct. Zool.* ii. No. 327.—*Will. (Angl.)* p. 241. t. 43.—*Lath. Syn.* iv. p. 540. 7.—*Bew. Birds,* i. p. 250.

HABITAT

in Europa, America; in Anglia passim in hortis.—4 pollices longus. W.

† In Italian, *Cingallegra*: in German, *Tannenmeise*, *Kleine Kohlmeise*, *Hunds-meise*: in Polish, *Sikora Czarna Mnicyus*.



THE COLEMOUSE.

tion of certain mysterious properties of numbers, especially of the odd ones, which have ever been supposed to influence the phenomena of nature.

The Colemouse differs from the ox-eye, not only in regard to size, being no more than the third or fourth of the weight, but also by the colours of its plumage; as will appear by comparing the descriptions. Frisch says, that in Germany it inhabits the pine forests; but in Sweden it prefers the alders, according to Linnaeus. It is the least timorous of all the titmice: not only the young ones flock to the voice of another titmouse, and are decoyed by means of the call; even the adults, which have been caught several times, and have fortunately escaped, are as easily ensnared again in the same gins. However, these birds discover as much or even more sagacity in many actions which concern their own preservation, or that of their brood; and perhaps the courage which they possess extinguishes alike mistrust and

the mouse lives in the woods, especially in those which contain firs and other evergreen trees, and in gardens: it creeps and hides like the other titmice. Next to the long-tailed one, it is the smallest of all; it weighs only two gros: it has a sort of black cowl, terminated with white on the back of the head, and marked below the eyes with the same colour: the upper side of the head is cinereous,

the under dirty-white: there are two transverse white spots on the wings; the quills of the tail and of the wings, brown ash-colour, edged with grey: the bill black, and the legs lead-coloured.

Total length, four inches and a quarter; the bill, four lines and two-thirds; the *tarsus*, seven lines; the hind nail is the strongest; the lateral ones are proportionally longer than in the ox-eye: the alar extent, six inches and three quarters; the tail, twenty lines, and rather forked, consisting of twelve quills; it exceeds the wings ten lines. *

Mahrng has observed that, in this species, the end of the tongue is truncated only at the edges, from each of which a filament projects, and that the intermediate space is entire, and rises almost perpendicular*.

* It inhabits as far north as Siberia, where it continues even through the winter: its egg is whitish, with small reddish spots.

ARIETIES of the COLEMOUSE*

I.

THE MARSH TITMOUSE, or BLACKCAP

I KNOW that many naturalists regard this bird as distinguished from the preceding by considerable differences. Willughby says that

* CHARACTER SPECIFICUS.

PARUS PALUSTRIS. P. capite nigro, dorso cinereo, temporibus albis.—*Lath. Ind. Orn.* ii. p. 505. No. 9.

PARUS PALUSTRIS.—*Gmel. Syst.* i. p. 1009.—*Raii Syn.* p. 73. A. 3.—*Will.* p. 175. t. 43.—*Bris.* iii. p. 555. 7.

LA MESANGE DE MARAIS.—*Buff. Pl. Enl.* 3. f. 3.

LA NONETTE CENDRE'E.—*Buff. par Sonn.* lii. p. 234. pl. 150. f. 1.

MARSH TITMOUSE, or BLACKCAP.—*Br. Zool.* i. No. 165. t. 57 f. 4. — *Arct. Zool.* ii. p. 427. E.—*Id. (Angl.)* p. 241. t. 43. — *Lath. Syn.* iv. p. 541. 3. — *Id. Sup.* p. 139. *Bew. Birds.* i. p. 254.

HABITAT

cum præcedente.

W.

† In Italian, *Parolozino Palustre* : in German, *Gartenmeise* (garden - titmouse), *Bien - meise* (bee-titmouse): in Swedish, *En-Tita Tomlinge* : in Polish, *Sikora Populata*.

it is larger, its tail longer, and that it has less black under its throat; that the white of the lower side of its body is purer, and that it has no white on the back of the head, or on the wings. But if we consider that most of these distinctions are not permanent, particularly the spot on the back of the head*, though it is reckoned among the specific characters of the Colmouse; if we consider that the same name (*charbonniere*) *collier* has been applied to both, and the epithet* of *marsh*, which is commonly bestowed on the Blackcap, would also suit the preceding species, since, according to Linnæus, it lodges in alders, which grow in wet situations: lastly, if we consider the numerous points of analogy that subsist between the two species, their haunts, their size, their breadth, the sameness of their colours, and their nearly similar distribution, we shall be convinced that it is only a variety of the Colmouse.

The Marsh Titmouse lives more in the woods than in the vineyards and gardens, feeding on small seeds, preying on wasps, bees, and grasshoppers, and forming stores, of hemp-seeds, when there is occasion, carrying several at once in its bill to place in the deposit, and consuming them afterwards at leisure. Its manner of eating undoubtedly gives it this foresight:

* A Colmouse observed by the authors of the British Zoology wanted this spot; and M. Lottinger assures me, that if the Marsh Titmouse had this spot on the back of the head, it would differ not from the Colmouse.

it requires time and a convenient place to pierce each seed with its bill; and if it had not collected provisions, it would often be reduced to want.

The Marsh Titmouse is found in Sweden, and even in Norway, in the forests which skirt the Danube, in Lorraine, in Italy, &c. Salerne says that it is unknown in the Orleanois, in the neighbourhood of Paris, and in Normandy. It is fond of lodging among the alders, the sal-lows, and of haunting wet spots. It is a solitary bird, which continues in the country through the whole year; it can hardly be bred in the cage. A nest was brought to me which was found in a hollow apple-tree in the midst of a little clump, not far from a river: it consisted of a little moss laid in the bottom of the hole. The young ones, which were already able to fly, were rather browner than the parent, but their legs were of a lighter lead colour; no scalloping on the edges of the bill, of which the two mandibles were very equal. What was remarkable, the gizzard of the young ones was larger than that of the adults in the ratio of five to three; the intestinal tube was also proportionally longer; but neither of them had a gall-bladder, or the least vestige of a *cæcum*. I found in the gizzard of the parent some fragments of insects and a grain of dry earth, and in that of the young ones several little pebbles.

The Marsh Titmouse is rather larger than the Colemouse, for it weighs three gros. I need

not describe its plumage; it will be sufficient to mark the chief differences.

Total length, four inches and one-third; the bill, four lines; the *tarsus*, seven lines; the alar extent, seven inches; the tail two inches, consisting of twelve quills, and projects twelve lines beyond the wings.

M. Le Beau brought from Louisiana a titmouse, which resembles much the present; only it wants the white on the back of the head, and the two streaks of the same colour on the wings; also the black mark on the throat was larger, and in general the colours of the plumage rather deeper, except that in the female the head was of a rusty-grey, nearly like the upper side of the body, but still darker.

Total length, four inches and a half; the *tarsus*, seven or eight lines; the hind nail the strongest; the tail twenty-one lines, rather tapered (which is another distinctive character), and exceeding the wings about nine lines.

II.

THE CANADA TITMOUSE*.

The Black-headed Titmouse of Canada bears a great resemblance to the Colemouse: it has nearly the same proportions and the same plumage; the head and throat black; the under side of the body white; the upper side dark cinereous, which, towards the rump, grows more dilute, and, on the superior coverts of the tail, runs into a dirty-white: the two intermediate quills of the tail are cinereous, like the back; the lateral ones also cinereous, but edged with white-grey; those of the wings brown, edged with the same white-grey; their great superior coverts brown, edged with grey; the bill black, and the legs blackish.

* CHARACTER SPECIFICUS.

PARUS ATRICAPILLUS. P. pileo gulaque nigris, corpore cinereo, subtus albo.—*Lath. Ind. Orn.* ii. p. 563. No. 10.

PARUS ATRICAPILLUS. — *Gmel. Syst. f.* p. 1008.—*Bris.* iii. p. 553. 6. t. 29. f. 1.—*Phil. Trans.* lxii. p. 407.

LA MISANGE à TÊTE NOIRE de CANADA. — *Buff. par Sonn.* lii. p. 240.

CANADA TITMOUSE.—*Arct. Zool.* ii. No. 328.—*Lath. Syn.* iv. p. 548. 9.

HABITAT

in America septentrionali.

W.

Total length, four inches and a half; the bill, five lines; the *tarsus*, seven lines and a half; the alar extent, seven inches and a half; the tail twenty-six lines, consisting of twelve equal quills, and exceeds the wings an inch.

Since the titmice frequent the northern countries, it is not strange that we should find in America varieties of the European species.

III.

If the White-throat* of Willughby be not a fauvette (*spipola*), as he supposes, but a titmouse, as Brisson reckons it†, I should range

* CHARACTER SPECIFICUS.

SYLVIA CINEREA. S. supra cinerea, subtus alba, rectrice prima longitudinaliter dimidiato alba, secunda apice alba.
—*Lath. Ind. Orn.* ii. p. 514. No. 23.

MOTACILLA SYLVIA.—*Gmel. Syst.* i. p. 956.

PARUS CINEREUS. — *Brisson*, iii. p. 549. 4. — *Buff. par Sonn.* lii. p. 212.

FICEDULÆ AFFINIS, an SPIPOLA PRIMA ALDR.—*Raii Syn.* p. 77. A. 6.—*Will.* p. 171.

FIRST SPIPOLA of ALDROVANDUS.—*Will. (Angl.)* p. 210.

HABITAT

in Europa, forte in Anglia—longitudine 6 pollicum. W.

† Parus Cinereus.—*Bris.*

it with the marsh titmouse, and consequently with the Colemouse. Its head is deep cinereous; all the upper side of the body rusty cinereous; the under side white, tinged with red in the male, except the origin of the neck, which in some subjects is pure white, and in others has a cinereous tinge, as well as the fore side of the neck and breast: the first quill of the wing is edged with white, the last ones with rufous; the quills of the tail black, edged with lighter colour, except the outermost, which is white, though not in all subjects; the bill is black, yellow internally; the lower mandible whitish in some subjects; the legs sometimes yellowish-brown, and sometimes lead-coloured.

The White-throat is found in England during the summer: it visits the gardens, lives on insects, makes its nest in the bushes near the ground (and not in holes of trees like the titmice), and lines it with hair: it lays five eggs dotted with black, on a greenish light-brown ground. It is nearly as large as the marsh titmouse.

Total length, from five inches and three quarters to six inches; the hind toe the strongest; the two lateral ones equal, exceedingly small, and connected to the mid-one, the outer by its first phalanx, the inner by a membrane, which is uncommon in birds of this kind; the alar extent, eight inches; the tail two inches and a half, consisting of twelve quills, rather

tapered; it exceeds the wing sixteen or seventeen lines *.

IV.

I have at present before me a bird which the Marquis de Piolenc sent from Savoy under the name of *Creper*, but which must be referred to the same species. Its head is variegated with black and cinereous-grey; all the rest of the upper part, including the two middle quills of the tail, of the same grey; the outer quill blackish at the base, grey at the end, and crossed near its middle by a white spot; the next quill marked with the same colour, but on its inside only; the third in the same way, but nearer the end, so that the white always contracts, and the black extends so much farther: it gains still more in the fourth and fifth quill, which have no white at all, but are tipped with ash-grey, as in the preceding: the quills of the wings are

* I have seen in cabinets a bird, whose plumage resembled remarkably that of this timouse, but which differed by its proportions. Its total length was five inches and a half; its *tarsus*, ten lines; its tail, twenty-nine lines, exceeding the wings only by an inch: but the most remarkable circumstance that discriminated it was its bill, seven lines long, and three lines thick at the base.

blackish; the middle ones bordered with ash-grey; the great ones with dirty-grey: each wing has a longitudinal, or rather a yellowish-white streak: the throat is white, and also the anterior margin of the wing; the fore part of the neck, and all the lower part, light rufous: the inferior coverts of the wings, the nearest the body, are rusty, the succeeding black, and the longest white: the upper mandible is black, except the ridge, which is whitish, and so is the lower mandible: lastly, the legs are yellowish-brown.

Total length, five inches and one-third; the bill, six lines and a half; the *tarsus*, eight lines; the hind-toe as long and thicker than the mid-one, and its nail the strongest; the alar extent, seven inches and three quarters; the tail eighteen lines, consisting of twelve quills, rather unequal, and shorter in the middle; it exceeds the wings ten lines.

THE BLUE TITMOUSE*†.

Few birds are so well known as this; because few are so common, so easily caught, or so distinguished by the colours of their plumage. Blue predominates on the upper side, yellow on the lower; and a nice distribution of black and white discriminates and heightens the different

* CHARACTER SPECIFICUS.

PARUS CÆRULEUS. P. olivaceo virescens, subtus luteus, remigibus cærulescentibus, primoribus margine exteriore albis, fronte alba, vertice cæruleo.—*Lath. Ind. Orn.* ii. p. 566. No. 12.

PARUS CÆRULEUS.—*Gmel. Syst.* i. p. 1008.—*Raii Syn.* p. 74. A. 4.—*Will.* p. 175. t. 43.—*Bris.* iii. p. 544. 2.

LA MESANGE BLEUE.—*Buff. Pl. Enl.* iii. f. 2.—*Buff. par Sonn.* iii. p. 247. pl. 150. f. 2.

BLUE TITMOUSE.—*Br. Zool.* i. No. 163. t. 57.²f. 2.—*Arct. Zool.* ii. p. 427. D.—*Will. (Angl.)* p. 242. t. 43.—*Lath. Syn.* iv. p. 543. 10.—*Bew. Birds,* i. p. 248.

HABITAT

in Europa.

W.

† In Italian, *Paro-zolino*, *Fratino*: in Spanish, *Milchiero*: in Portuguese, *Chamaris*, *Alionine*: in German, *Blau-meise* (blue titmouse), *Mehl-meise*, (meal titmouse): in Swedish, *Blau-meis*: in Norwegian and Danish, *Blaa-meise*: in Polish, *Sikora Modra*.

hues, which are also diversified by a variety of different shades. The Blue Titmouse is the better known on account of its pernicious visits to our gardens, where it plucks the blossoms from the fruit-trees: it even dexterously employs its little claws to detach the ripe fruit from the branch, which it afterwards carries to its deposit. But it does not subsist wholly in this way; it has the same propensity to flesh with other titmice, and it picks so clean the bodies of the little birds which it masters, that Klein proposes to employ it for preparing their skeletons*. It also distinguishes itself above all the rest by its rancour against the owl. The Viscount de Querhoënt observes, that it does not always split the seeds of hemp like the other titmice, but bruises them in its bill, like the canaries and linnets: he adds, that it shows more foresight than the rest, since it selects for its winter haunt a warmer site, and one of more difficult access; commonly a hollow tree, or the crevice of a wall.

The female also builds in holes, and is not sparing of feathers; she lays in the month of April a great many small white eggs: I have counted from eight to seventeen in the same nest; others have found even twenty-one. I am assured that there is only one hatch, unless the incubation is disturbed: a single egg broken,

* He advises us previously to remove most of the flesh and the brain of the bird, whose skeleton we want to have prepared.

or even handled, will occasion the whole to be forsaken. But after the young are excluded, the mother discovers a strong attachment, and defends them with courage: she is inflamed, and whistles a threatening air when disturbed in her prison. The cock seems to repose more at ease, and generally clings to the top of the cage. Besides the disagreeable grinding, it has a slender but varied chirp, which has been supposed to bear some resemblance to that of the chaffinch.

Frisch alleges that the Blue Titmouse will not live in the cage, and cannot therefore be used as a call-bird. I have seen some, however, that were kept many months in confinement, and died only of excessive fat.

Schwenckfeld tells us, that in Silesia this titmouse is found at all seasons on the mountains. With us, it prefers the woods, especially in summer, and next to these the vineyards, the gardens, &c. Lottinger says, that it travels in company with the ox-eye; but the society between petulant and cruel animals must be turbulent and temporary. It is said that its young continue longer together than that of the other species.*.

The* Blue Titmouse is very little, since it weighs only three gros.; but Belon, Klein, and the traveller Kolben, ought not to have represented it as the smallest of the titmice. The

* Journal de Physique, Août 1776.

hen is rather smaller than the cock, and has less blue on the head; and this blue, as well as the yellow of the under side of the body, is not so bright: what is white in the parents is only yellowish in the new-fledged brood: what is blue in the former, is ash-brown in the latter; but their wing-quills are proportionally as large as those of the adults.

Total length, four inches and a half; the bill, four lines and a half; the two mandibles equal, and without any indenting; the tongue truncated, terminated with filaments, some of which are commonly broken; the *tarsus*, six lines and a half; the legs are exceedingly thick, the hind-nail the strongest; the alar extent, seven inches; the tail twenty-five lines, and projecting twelve beyond the wings; each of its halves is tapered, and composed of six quills. The young ones, of which I dissected a pretty large number in May, had all of them rather a smaller gizzard than that of their dam, but a longer intestinal canal. There were two slight vestiges of *cæca*, and no gall-bladder.

THE BEARDED TITMOUSE*.

I CANNOT be positive whether this bird is really found in India, as Frisch seems to hint; but it appears to be very common in Denmark, and is now spreading through England. Edwards mentions several cocks and hens that were killed in the neighbourhood of London, and so little known that they had no name. The Countess of Althorpe brought a cage

CHARACTER SPECIFICUS.

PARUS BIARMICUS. P. rufus, vertice cano, cauda corporis longiore, capite barbato, crisso nigro.—*Lath. Ind. Orn.* ii. p. 570. No. 23.

PARUS BIARMICUS.—*Gmel. Syst.* i. p. 1011.

——— **BARBATUS.**—*Briss.* iii. p. 567. 12.

LA MESANGE BARBUE, ou LA MOUSTACHE.—*Buff. Pl. Enl.* 618 t. 1. 2.

LA MOUSTACHE.—*Bark. par Sonn.* lii. p. 255. pl. 151. f. 1.

LEAST BUTCHER-BIRD †.—*Edw.* t. 65.

BEARDED TITMOUSE.—*Br. Zool.* i. No. 167.—*Arct. Zool.* ii. p. 428. ~~Id.~~—*Lath. Syn.* iv. p. 552. 20.—*Id. Sup.* p. 190.—*Bew. Birds,* i. p. 255.

HABITAT

in Europa, in arundinetis Angliæ.—6½ pollices longus. W.

† In German, *Spitz-bartiger* (bearded sparrow).



FIG. 1. THE MALE BEARDED TITMOUSE FIG. 2. THE FEMALE.

full of them from Denmark *; and some of these doubtless escaped, and founded a colony in England. But whence came those which Albin says were reported to inhabit the counties of Essex and Lincoln, and always among the fens?

It is to be wished that the habits of these birds were better known. Their history would be curious, if we may judge from what is related, that when they rest the male spreads his wings over his mate; and this attention, were it well authenticated, must imply many other interesting particulars with regard to incubation.

The most characteristic feature of the male is a black mark, very nearly triangular, on each side of the head: the base of this inverted triangle rises a little above the eyes, and its vertex is turned downwards, and falls on the neck nine or ten lines from the base: these two black marks, which have pretty long feathers, bear some resemblance to whiskers, and hence the names of the bird in different countries. Frisch supposes that it is analogous to the canary, and that the two species would intermix; but adds, that the Bearded Titmice are too rare for making the necessary experiments. This

* Since they are so common in Denmark, I am surprised that the name occurs not in Muller's *Prodromus Zoologæ Danicæ*.

opinion of Frisch is inconsistent with that of Edwards and Linnæus, who suppose it to resemble the shrike. But though these views be opposite, they agree in one circumstance, that the bill of the Bearded Titmouse is larger than ordinary in titmice. On the other hand, Lottinger affirms that it breeds in the holes of trees, and often consorts with the long-tailed titmouse; which, joined to the family likeness and other resemblances in size, exterior figure, mien, and habits, rank it with the titmice.

The head of the male is pearl-grey; the throat, and the fore part of the neck, of a silvery white; the breast of a sullied white; tinged with grey in some subjects, and rose-colour in others; the rest of the under side of the body rusty; the inferior coverts of the tail black; those of the wings yellowish - white; the upper side of the body light rufous; the anterior edge of the wings white; the small superior coverts blackish; the great ones edged with rufous, the middle ones with the same, edged interiorly with lighter rufous; the great quills edged with white externally; those of the tail entirely rufous, except the outermost, which is blackish at the base. and of a rufous-ash colour near its extremity; the iris orange; the bill yellowish, and the legs brown.

In the female there is no red tinge under the body, nor black marks on the sides of the head, which is brown, and also the inferior coverts of

the tail, of which the lateral quills are blackish tipped with white. The female is also rather smaller than the male.

Total length of the last, six inches and a quarter; the bill, less than six lines; the upper mandible a little hooked, but without any indenting, according to Edwards himself, which is very different from a shrike; the *tarsus*, eight lines and a half; the alar extent, six inches and a half; the tail thirty-six lines, consisting of twelve tapered quills, so that the two exterior ones are only half as long as the two middle ones; it exceeds the wings twenty-seven lines.

THE PENDULINE TITMOUSE*,

EDWARDS suspects this bird, which is figured in the work of Albin, to be the same with the

* CHARACTER SPECIFICUS.

PARUS PENDULINUS. P. capite subferrugineo, fascia oculari nigra, remigibus rectricibusque fuscis margine utroque ferrugineo.—*Lath. Ind. Orn.* ii. p. 568. No. 18.

PARUS PENDULINUS.—*Gmel. Syst.* i. p. 1014.

—— **POLONICUS, sive PENDULINUS.**—*Briss.* iii. p. 565
* 11. t. 29. f. 2.

LA MESANGE de POLOGNE.—*Pl. Enl.* 618. f. 3.

LE REMIZ.—*Buff. par Sonn.* iii. p. 261. pl. 151. f. 3.

MOUNTAIN TITMOUSE †.—*Alb.* iii. t. 57.

PENDULINE TITMOUSE.—*Coxe's Trav.* i. t. in p. 218. (*Aves cum Aido.*)—*Lath. Syn.* iv. p. 547. 16.

HABITAT

in Polonia, Hungaria, Italia.---4½ pollices longus. W.

† In Italian, *Pendolino*; in German, *Weiden-meise* (willow titmouse), *Rohr-spatz* (reed sparrow), *Persianischer-spatz*, *Turquisher-spatz*; in Polish, *Remcz*, *Remis*, *Remiz*, *Remizawy*, *Ptak*, *Remcz*, *Remitsch* *Remisch*; in Russian, *Remesof*; in Hungarian, *Maundieck*.

The name *Picus nidum suspendens* (hang-nest woodpecker), which Aldrovandus gives from Pliny, would agree much better with the Penduline Titmouse, or Remiz. Some have reckoned a land remiz, and a water remiz; but the latter is

bearded titmouse; but this idea seems contradicted by several circumstances: 1. The figures referred to, though accurate, differ considerably. 2. According to Albin, the bearded titmouse weighs more than nine gros, and he represents the mountain titmouse as equal to the blue titmouse, which is only three gros. 3. The plumage is different; and particularly the black bar on the side of the head has a very different position in each. 4. The climate also differs: for Albin makes some of the counties in England the ordinary haunt of the bearded titmouse; but regards the Penduline Titmouse as an inhabitant of Germany and Italy. Nor do Kramér and Linnaeus appear to judge better in considering these two birds as distinguished only by their sex; and I cannot, with Edwards and Linnaeus, perceive any strong resemblance between these and the shrikes. It is true that the shrikes have a black stripe on the eyes, and that the Penduline Titmouse interweaves its nest; but the materials are different, and also the manner of fastening the nest, the shape of the bill, the claws, the food, the size, proportions, strength, gesture, &c. It would seem that neither Edwards, nor any of the naturalists who have adopted his opinion, had ever seen this bird.

probably the reed-hunting. Lastly, the anonymous author of a memoir inserted in the *Journal de Physique*, for August 1770, gives the Remiz the name of *marsh titmouse*.

The most curious fact in the history of these birds is the exquisite art displayed in the construction of their nest. They employ the light down found on the buds of the willow, the poplar, the aspen, the juncago; in thistles, dandelions, flea-banes, cats'-tails, &c. With their bill they entwine this filamentous substance, and form a thick close web, almost like cloth: this they fortify externally with fibres and small roots, which penetrate into the texture, and in some measure form the basis of the nest. They line the inside with the same down, but not woven, that their young may lie soft*: they shut it above to confine the warmth, and they suspend it with hemp, with nettles, &c. from the cleft of a small pliant branch, over running water, that it may rock more gently, assisted by the spring of the branch. In this situation the brood are well supplied with insects, which constitute their chief food †; and they are protected from the rats, the lizards, the adders, and other reptiles, which are always the most dangerous: and I am convinced that their conduct really proceeds from foresight; for they are naturally crafty, and, according to Monti and Titius ‡, they can

* Sometimes the down, or cotton-like substance, is rolled into little pellets, which make the inside of the nest neither so soft nor so pleasant.

† M. Monti found in the stomach of these birds insects almost digested, and nothing else.

‡ They are sometimes, adds Titius, surprised in the nest at sun-set, or in dark misty weather.

never be caught in snares; as the same circumstance has been remarked in the bonanas and cassiques of the New World, in the grosbeaks of Abyssinia, and in other birds which hang their nests from the end of a branch. That of the Penduline Titmouse resembles sometimes a bag, sometimes a shut purse, sometimes a flattened bagpipe, &c. * The aperture is made in the side, and almost always turned towards the water, and placed sometimes higher, sometimes lower: it is nearly round, and only an inch and a half in diameter, or even less, and

* Cajetan Monti has caused one to be engraved, and Daniel Titius two. These three nests differ not only from each other, but from that figured by Bonanni, both in size and form. The largest of all (Titius, *pl.* 2.) was seven inches long, and four and a half wide: it was suspended at the fork of a small branch with hemp and flax. The least (*pl.* 1.) was five inches and a half long, of the same breadth at its upper part, and terminating in an obtuse point: this, according to Titius, is the usual form. That of Monti was pointed above and below. Titius suspects that the Penduline Titmice only make a rude essay in constructing their first nest, and that the sides are then thin, and the texture quite loose; but that they improve at each subsequent hatch; and, as their mistrust grows upon them, they add firmer coats on the outside, and softer ones within: hence the differences observed in the form and bulk of these nests. About the end of December 1691, near Breslaw, was found a female siskin in one of these same nests, with a young one, and three eggs not yet hatched. This proves that the nests of the Penduline Titmice subsist from one year to another. Titius adds, that we need not wonder to see the siskin hatching in winter, since the cross-bills do the same.

commonly surrounded by a brim more or less protuberant*; though this is sometimes wanting. The female lays only four or five eggs, which falls much short of the ordinary fecundity of the titmice; but in its port, its voice, its bill, and in the principal attributes, the Penduline resembles the others. These eggs are as white as snow, the shell extremely thin, and they are almost transparent. The bird has generally two hatches annually; the first in April or May, and the second in the month of August. There is little probability that it makes a third.

These nests of the Penduline Titmouse are seen in the fens near Bologna, in those of Tuscany, on the lake Thrasymene, and are exactly the same with what occur in Lithuania, Volhonia, Poland, and Germany. The peasants regard them with superstitious veneration: one

* Aldrovandus has given a figure of this nest, which he imagined to be the long tailed titmouse, though he well knew that the bird was called *pendulino*.—*Ornithol.* t. ii. p. 718. Two of these nests seem glued together, and remind us of what Rzaczynski says of the nests with double apertures, found in Pokutia, on the banks of the Bystrick. An anonymous author of a memoir in the *Journal de Physique* for August 1776, goes farther than Aldrovandus, and, after having compared the Penduline and long tailed titmouse, observes a great analogy between the two birds. Yet had he followed the method of comparison exactly, he would have perceived that the Penduline Titmouse has its bill and legs proportionally longer, its tail shorter, its alar extent also, and its plumage different.

of these nests is suspended near the door of each cottage, and the possessors hold it as a protector from thunder, and its little architect as a sacred bird. We might also regret that nature is not more sparing of her wonders; for every extraordinary appearance is a source of new errors.

These titmice inhabit likewise Bohemia, Silesia, the Ukraine, Russia, Siberia, and wherever, in short, those plants grow that furnish the cotton for constructing their nests*. But they are rare in Siberia, according to Gmelin†: nor can they be very common near Bologna; since, as we have already observed, Aldrovandus was unacquainted with them. Daniel Titius regards Italy‡ as the original country of the Penduline Titmice, whence they passed into the state of Venice, into Carinthia, Austria, the kingdom of Bohemia, Hungary, Poland, and the more northern countries. They almost always haunt the marshes, and hide themselves among the bulrushes, and the foliage of the trees which grow in such situa-

* Daniel Titius remarks that Volhinia, Polesia, Lithuania, and other cantons of Poland, abound with marshes, and aquatic plants or trees, such as willows, alders, poplars, knapweeds, starworts, hawkweeds, juncagos, &c.

† *Voyage en Sibérie*, t. ii. p. 203. The Counsellor J. Ph. of Strahlenberg had observed these birds in Siberia before Gmelin, according to Daniel Titius.

‡ Hence the name *Romisch*.

tions. It is asserted that they never migrate on the approach of winter*. Such may be the case in temperate countries, where insects are found through the whole year: but, in the northern climates, I should suppose that the Penduline Titmice at least change their haunts during the intense colds; and, like the other titmice, resort to the inhabited spots. Accordingly, Kramer informs us that, in the vicinity of the city of Pruck, they are much more numerous in winter than in any other season; and that they always lodge, from preference, in the bulrushes and reeds.

It is said that they have a warble, though not well known. Yet the young ones taken from the nest have been kept several years, and fed solely on ants' eggs†: therefore they sing not in the cage.

The plumage of this bird is very ordinary: the crown of the head is whitish; the back of the head, and the upper side of the neck cinereous‡; all the upper side of the body grey, but tinged with rusty in the fore part; the throat, all the under side of the body, white, tinged with cinereous-grey before, and rusty behind:

* Cajetan Monti and Daniel Titius.

† Titius, p. 43, 44. In another place he says, that they sing better than the long-tailed titmouse, which, according to Belon, has a pleasant song.

‡ Daniel Titius saw a blackish spot near the first vertebra of the neck, and another near the anus.

there is a black bar on the face, that extends on both sides to the eyes, and much beyond them; the superior coverts of the wings brown, edged with rufous, which becomes gradually more dilute near the extremity; the quills of the tail and of the wings brown also, but edged with whitish; the bill cinereous; the legs reddish-cinereous.

It appears, from the description of Cajetan Monti, that in Italy the Penduline Titmice have more rufous in their plumage, and a slight tinge of green on the superior coverts of their wings, &c. and, from that of Gmelin, that those in Siberia have the back brown, the head white, and the breast tinged with rufous. But these are only variations occasioned by the climate, or perhaps owing to the difference of description; for a considerable diversity of appearance will arise from the distance they are held from the eye, and the light with which they are viewed.

The female, according to Kramer, is without the black bar as in the male: but, according to Gmelin, it has that bar. In both, the iris is yellow, and the pupil black: and they are scarcely larger than the common wren; that is, they are nearly the same size with the blue titmouse.

Total length, four inches and a half; the bill, five lines; the upper mandible a little incurvated; the lower longest in the young

ones*; the *tarsus*, six lines and a half; the nails very sharp, the hind one longest: the alar extent, seven inches and one third; the tail two inches, consisting of twelve quills, a little tapered, and exceeding the wings thirteen lines.

* Titius, p. 19 and 23.

THE LANGUEDOC TITMOUSE*.

MONTI supposed that the remiz, or penduline titmouse, was the only European bird that suspended its nest from branches † : but, not to mention the golden oriole, which fastens its nest sometimes to slender boughs, and which Frisch had mistaken for the long-tailed titmouse §, there is another species well known in

* CHARACTER SPECIFICUS.

PARUS NARBONIENSIS. P. rufo-griseus, vertice cano, alis caudaque nigricantibus rufo marginatis, remigibus primoribus margine albis.—*Lath. Ind. Orn.* ii. p. 568. No. 19.

PARUS NARBONIENSIS.—*Gmel. Syst.* i. p. 1014.

LA PENDULINE †.—*Buff. par Sonn.* lii. p. 273. pl. 152. f. 1.

LA MESANGE de LANGUEDOC.—*Pl. Enl.* 703. f. 1.

LANGUEDOC TITMOUSE.—*Lath. Syn.* iv. p. 549. 17.

HABITAT

in Gallia narboniensi.

W.

† In Languedoc it is vulgarly called *the wild canary*. The bird and nest were sent by M. de Brouse, Mayor of Aramont, deputy of the States of Languedoc.

‡ See *Collection Academique partie etrangere*, t. x. p. 371.—*Academie de Bologne*.

§ This error was the easier avoided, since the nest of the oriole is cup-shaped, open above ; and since that bird never employs the down furnished by the flowers and leaves of certain plants, even though they grow abundantly near it.

Languedoc, though entirely overlooked by the naturalists, which builds as artfully as the Polish titmouse, and displays even more sagacity in the structure. It deserves the more our attention, because its talents have not attained the same celebrity. It may be considered as analogous to the penduline titmouse, but not as a mere variety: the differences in its size, its proportions, its colours, the shape of its nest, &c. are fully sufficient to constitute it another species.

The nest is very large, compared with the size of the bird; shut above, and has nearly the bulk and shape of an ostrich's egg: its greater axis is six inches; its smaller axis, three and a half. It is suspended from the fork of a flexible poplar-branch; and to give greater stability, it is wrapped with wool, for the space of more than seven or eight inches; and the down of the poplar, the willow, &c. is also used. The aperture is placed in the side near the upper part, and has also a sort of projection, or penthouse, that juts eighteen lines. From these precautions the young are better sheltered and concealed, and consequently safer than those of the penduline titmouse.

The throat and all the under side of the body are rusty-white; the upper side rusty-grey, deeper than the under; the top of the head grey; the superior coverts of the wings blackish, edged with rufous, and likewise the middle quills: but the rufous grows more dilute

near the end. The great quills blackish, edged with whitish; the quills of the tail blackish, edged with light rufous; the bill black; the upper ridge brownish-yellow; the legs lead-colour.

Total length, rather less than four inches; the bill, like that of the titmouse, and four lines and a half; the *tarsus*, six lines; the hind nail the strongest of all, a little hooked: the tail, eleven or twelve lines, would be exactly square, were not the two exterior quills a little shorter than the rest: it exceeds the wings six lines.

THE LONG-TAILED TITMOUSE*†.

THIS very small bird is best distinguished by the length of its tail, which exceeds that of its body. It is slender, and its flight so rapid, that it seems like a dart shooting through the

* CHARACTER SPECIFICUS.

PARUS CAUDATUS. P. albo roseo nigroque longitudina-
liter varius, vertice albo, cauda longiore:—*Lath. Ind.*
Orn. ii. p. 569. No. 20.

PARUS CAUDATUS.—*Gmel. Syst.* i. p. 1010.—*Raii Syn.*
p. 74. A. 5.—*Will.* p. 176. t. 43.

PARUS LONGICAUDUS.—*Bris.* iii. p. 570. 13.

LA MESANGÈRE À LONGUE QUEUE.—*Buff. Pl. Enl.* 502. f. 3.
—*Buff. par Sonn.* lii. p. 277. pl. 152. f. 2.

LONG-TAILED TITMOUSE.—*Br. Zool.* i. No. 166.—*Arct.*
Zool. ii. p. 428. G.—*Will. (Angl.)* p. 242. t. 43.—*Lath.*
Syn. iv. p. 550.—*Id. Sup.* p. 190.—*Bew. Birds,* i. p. 251.

HABITAT

in Europa passim, et Sibirix hortis.—5 fere pollices longus.
W.

† In Greek, Αγιθαλος ορεινος, or mountain titmouse:
—*Arist. Hist. Anim.* lib. viii. 3. In Italian, *Paronzino*, *Pul-*
zonzino, *Pendolino*: in German, *Schwantz-maise* (tail-tit-
mouse), *Zagel-maise*, (the same), *Pfannen-stiel*, or *Pfannen-*
stirgliz (tail-siskin), *Riet-maise* (reed-titmouse), *Berg-muisc*
(mountain-titmouse), *Schnee-maise* (snow-titmouse): in Po-
lish, *Sikora* *Zdtugim Ogonem*.



THE LONG-TAILED TITMOUSE.

air*. . But notwithstanding this remarkable disparity †, it has still the essential characters of the titmice: its bill is short, yet pretty strong: its chief residence is in the woods; it is active and restless, fluttering incessantly from bush to bush, from shrub to shrub; running among the branches, hanging by the feet, lives in society, attending to the call of its companions; feeds on caterpillars, flies, and other insects, sometimes seeds; crops the buds from the trees; lays a great many eggs: in fine, according to the most accurate observations, it has the principal exterior characters of the titmice; and, what is more decisive, it has their habits and economy. Nor is the long-tapered tail **entirely** distinct from those of all the other titmice, since those of the bearded and penduline kinds are somewhat of the same form.

With regard to the mode of constructing its nest, it follows a middle plan between that of the ox-eye and colemouse and that of the penduline titmouse. It does not conceal it in the hole of a tree, which would be ill adapted for

* British Zoology.

† This disparity induced Ray to suppose it a distinct genus. The authors of the British Zoology observe, that it much resembles the titmouse in the form of its bill, which is more curved than that of the titmice, and by other minute analogies; but there is evidently a wide difference between a shrub and the Long-tailed Titmouse. I am surprised that some nomenclator has not ranged the latter among the *motacilla*, where it would have made a figure, its long tail vibrating briskly and repeatedly up and down.

its long tail, and it seldom or never hangs it to a slender string; but it fixes it firmly in the branches of shrubs, three or four feet from the ground; works it into an oval, and almost cylindrical form; closes it above, leaving only an aperture of an inch in the side, and often makes two opposite holes, to avoid the inconvenience of turning*: a precaution the more useful, as the tail-quills are easily detached, and drop with the slightest ruffling†. The nest differs from that of the penduline titmouse in other circumstances also: it is larger‡, of a more cylindrical form; its texture is not so close; its little aperture has seldom the protuberant brim§; its outer coat consists of stalks of herbs, moss, lichens, and, in short, of the coarser materials; and the inside is lined with a great deal of feathers, and not with that cotton which the willows and other plants furnish the penduline titmouse.

The Long-tailed Titmouse lays ten or fourteen eggs, and even as many as twenty, concealed almost entirely beneath the feathers collected in the bottom of the nest; these eggs are of the size of a hazel nut, their greatest diameter being six lines; they are surrounded by a red-

* Frisch and Rzaczynski. •

† Hence it has been called *lose-tail* (*perd-sa-queue*).

‡ I measured one of these nests, which was eight inches high and four wide.

§ Cajetan Monti and Daniel Titius, compared together.

dish zone on a grey ground, which grows more dilute at the thick end.

The young continue with the parents through the whole winter, and hence the small flocks of twelve or fifteen seen during that season. They utter a small shrill cry, only as a call; but in the spring they acquire a new modulation, which makes it much more pleasant*.

Aristotle assures us, that these birds prefer the mountains. Belon says, that he observed them in all countries; and Belon had travelled: he adds, that they seldom leave the woods to visit the gardens. Willughby informs us, that in England they frequent the gardens more than the mountains: Hebert asserts the same, but restricts it to the winter season. According to Gesner, they appear during cold weather only, and haunt the marshes; whence their name *reed titmice*. Daubenton, the younger, has seen flights of them in the king's garden, about the end of December; and has informed me, that they are frequent in the woods of Boulogne. Lastly, some maintain that they continue through the winter;

* "It sings so pleasantly in the spring," says Belon, "that scarcely any bird has a voice so lofty and airy." Gesner asserts that, in this season, the Long-tailed Titmouse utters *quickeg, quickeg*: this seems not to be the *pleasant song* which Belon mentions. Others say that this titmouse has a feeble voice, and a little shrill cry, *ti, ti, ti, ti*; but this is certainly not the warble heard in spring.

others, that they migrate; and others, that they arrive later than the other titmice, and have therefore been called *snow titmice*. These opposite statements may be reconciled, by supposing, what is at the same time very probable, that these birds vary their range according to circumstances; that they remain when their situation is comfortable, and change when they want a better; that they inhabit the mountain or the vale, the bank or the marsh, the forest or the vineyard, or wherever they can enjoy convenience and subsistence. They are seldom caught in traps, and their flesh is unpleasant food.

Their feathers are loose, and resemble a very long down: they have a sort of black eyebrows, and the upper eyelids of an orange-yellow, but this colour is hardly visible in dried subjects; the upper side of the head, the throat, and all the under side of the body, white, shaded with blackish on the breast, and sometimes tinged with red on the belly, the loins, and under the tail: the back of the neck is black, whence rises a bar of the same colour, which stretches through the whole of the upper part of the body between two broad bars of bastard red; the tail black, edged with white; the fore part of the wing black and white; the great quills blackish; so are the middle ones, but edged with white, except those next the body, which are of the same

rufous with the back; the ground of the feathers deep cinereous; the iris grey; the bill black, but grey at the point; and the legs blackish.

The white bar on the crown of the head spreads more or less, and sometimes incroaches so much on the lateral black bars, that the head appears entirely white. In some subjects, the under side of the body is all white; such were those seen by Belon, and some that I have observed myself. In females the lateral bars of the head are only blackish, or even variegated with black and white, and the colours of the plumage are not well defined or contrasted. The bird is hardly larger than the gold-crested wren; it weighs about one hundred and fourteen grains. As its feathers are almost always bristled, it appears rather thicker than in reality.

Total length, five inches and two-thirds; the bill, three lines and a half, thicker than that of the blue titmouse, the upper mandible a little hooked; the tongue rather broader than in that bird, and terminated with filaments; the *tarsus*, seven lines and a half; the hind nail the strongest; the alar extent six inches and a half; the tail three lines and a half, consisting of twelve unequal quills, and irregularly tapered, increasing constantly in length from the outermost which is eighteen lines to the fifth which is forty-two, or thereabouts; the intermediate pair only thirty-nine at most, and

hardly equal to the fourth : the tail exceeds the wings about two inches and a half.

Its intestinal tube, four inches; only a slight trace of a *cæcum*; the gizzard muscular, and contained portions of insects and vegetables, a bit of a nut, but no pebbles.

THE CAPE TITMOUSE*.

THIS little titmouse was brought from the Cape of Good Hope by Sonnerat, who published a description of it in the *Journal de Physique*. Its plumage is black, grey, and white; the head, the neck, the upper and under sides of the body, light cinereous-grey; the quills of the wings black, edged with white; the tail black above, and white below; the iris, the bill, and the legs, black.

This bird resembles those preceding, particularly the long-tailed titmouse, in the manner it constructs its nest; which it places in the thickest bushes, but not at the extremity of the branches, as some naturalists have sup-

* CHARACTER SPECIFICUS.

PARUS CAPENSIS. P. cinereo-griseus, remigibus nigris albo marginatis, cauda nigra subtus alba.—*Lath. Ind. Orn.* ii. p. 570. No. 22.

PARUS CAPENSIS.—*Gmel. Syst.* i. p. 1011.

LA MESANGE du CAP DE B. ESP.—*Son. Voy. Ind.* ii. p. 206. t. 115.

LE PETIT DEUIL.—*Buff. par Sonn.* lii. p. 289.

CAPE TITMOUSE.—*Lath. Syn.* iv. p. 552. 19.

HABITAT

ad Caput B. Spei.

W.

posed. The cock assists the hen in building; he strikes his wings forcibly against the sides of the nest, and compacts it into the form of an elongated ball; the aperture is in the side; the eggs in the centre, where they are safest and warmest. So far the construction agrees with the long-tailed titmouse: but there is besides a small compartment where the male lodges during the incubation.

THE SIBERIAN TITMOUSE*.

WE saw this bird in M. Mauduit's cabinet; but we are unacquainted with its history. Muller makes no mention of it, and perhaps it is not found in Denmark, though it was sent from Siberia. On the throat and the fore-part of the neck is a black mark, which descends on the breast, accompanied on each side with a white bar, which rises from the corners of the mouth, passes below the eye, and descends spreading as far as the wings, and extends, on each side, on the breast, where it assumes a cinereous hue, and forms a broad cincture: all the rest of the under side of the body is rusty-grey; so is the upper side, but deeper; the upper part of the head and neck, brown-grey; the superior coverts of the wings, their quills, and those of the tail, ash-brown: the quills of the wings, and the outer quill of

* CHARACTER SPECIFICUS.

PARUS KNJAESCIK. P. albus, subtus macula continua. linea oculari et collari lividis.—*Luth. Ind. Orn.* ii. p. 572. No. 30.

PARUS KNJAESCIK.—*Gmel. Syst.* i. p. 1013.—*Lepch. It.* i. p. 181.

HABITAT

in Sibiriae quercetis.

W.

the tail, edged with rufous-grey ; the bill and legs, blackish.

Total length, five inches ; bill, six lines ; the *tarsus*, seven lines ; the tail twenty-two lines, and exceeds the wings fifteen lines : it is a little tapered, in which respect this species resembles more the bearded, the penduline, and the long-tailed titmouse, than the others, in all which it is a little forked.

THE CRESTED TITMOUSE * †.

It has a handsome black-and-white crest, which rises eight or ten lines on the head, and whose feathers taper with an elegant regularity. The bird is also naturally perfumed, and exhales the scents of the junipers and

* CHARACTER SPECIFICUS.

PARUS CRISTATUS. P. griseo-rufescens cristatus, collari nigro, ventre albo.—*Lath. Ind. Orn.* ii. p. 567. No. 14.

PARUS CRISTATUS.—*Gmel. Syst.* i. p. 1005.—*Raii Syn.* p. 74. 6.—*Will.* p. 175. t. 43.—*Bris.* iii. p. 558. 8.

LA MESANGE HUPPE'E. — *Buff. Pl. Enl.* 502. f. 2. — *Buff. par Sonn.* lii. p. 294. pl. 153. f. 1.

CRESTED TITMOUSE. — *Arct. Zool.* ii. p. 427. F.—*Will.* (*Angl.*) p. 242. t. 43.—*Lath. Syn.* iv. p. 545. 12.

HABITAT

in Europæ densis sylvis, potissimum pinetis.—4½ pollices longus.—Solitaria avis. W.

† In German, *Schopf-meise* (tufted titmouse), *Hauben-meise* (capped titmouse), *Heiden-meisslin* (heath titmouse), *Struss-meisslin* (strutting titmouse), *Kopf-meise* (head titmouse): in Swedish, *Tofs-mussa*, *Tofs-tita*, *Meshatt*: in Polish, *Sikora-czubata*.

other resinous trees and shrubs, among which it almost constantly lodges*. And these advantages, which seem appropriated to the luxury of society, are enjoyed in the wildest solitude; not so completely perhaps, but surely in more tranquillity. Forests and heaths, especially those abounding with junipers and firs, are its favourite haunts; there it lives sequestered, and shuns the company of all other birds, even those of its own species†. It is equally beyond the reach of man: its retreat and its caution save it from the fowler's snares. It is seldom caught in traps; and, if surprised, it will refuse food, and, spurning every soothing attention, will expire in confinement. Hence it is little known: we learn only that, in its congenial solitude, it feeds upon the insects which it catches as they fly about the trees; and that it has the chief character of the titmice, great fecundity.

Of all the French provinces, Normandy is that where it is most common. It is unknown, says Salerne, both in Orleanois, and in the neighbourhood of Paris. Belon makes no men-

* Charleton.

† This is the opinion of Frisch, corroborated by that of the Viscount de Querhoënt. Yet, I must own, that, according to Rzaczynski, the Crested Titmice go in flocks; but his authority will not outweigh that of the other two observers. Rzaczynski adds, that, in autumn, many of these birds are caught in the mountains.

tion of it, nor *Olinia*; and *Aldrovandus* would seem to have never seen it: so that Sweden, on the one side, and the north of France on the other, are the limits of its excursions.

Its throat is black, its face white, and also its cheeks, on which the white is framed in a slender black collar, which rises from the two sides of the black mark on the throat, and mounts in a curve to the back of the head: there is a black vertical bar behind the eye; the under side of the body, whitish; the flanks, light rufous; the upper side of the body, rufous-grey; the ground of the feathers, black; the quills of the tail grey, and those of the wings brown; all of them edged with rufous-grey, except the great ones of the quills, which are partly dirty-white; the bill blackish, and the legs lead-coloured.

Willughby perceived a greenish tinge on the back, and on the outer edge of the quills of the tail and of the wings: Charleton saw a similar tinge on the feathers that compose the crest; probably these feathers have different reflections, or vary slightly from age, sex, &c.

This bird weighed about the third of an ounce, and was hardly larger than the long-tailed titmouse.

Total length, four inches and three-quarters; the bill, five lines and a half, the tongue terminated by four filaments; the *tarsus*, eight lines; the hind-nail the strongest; the alar ex-

tent, seven inches and a half; the wing composed of eighteen quills; the tail about twenty-two lines, a little forked, and composed of twelve quills; it exceeds the wings ten lines.

FOREIGN BIRDS

WHICH ARE RELATED TO THE TITMICE.

I.

THE CRESTED TITMOUSE of CAROLINA *.

THE crest of this foreign bird is not permanent, but only rises and tapers to a point during a fit of passion; ordinarily its feathers recline flat on the head.

* CHARACTER SPECIFICUS.

PARUS BICOLOR. P. capite cristato antice nigro, corpore cinereo, subtus ex albido rufescente. — *Lath. Ind. Orn.* ii. p. 567. No. 13.

PARUS BICOLOR. — *Gmel. Syst.* i. p. 1005.

—— CAROLINENSIS CRISTATUS. — *Bris.* iii. p. 561. 9.

LA MESANGE HUPPE'E de la CAROLINE. — *Buff. par Sonn.* iii. p. 299.

CRESTED TITMOUSE. — *Cat. Car.* i. t. 57.

TOUPET TITMOUSE. — *Arct. Zool.* i. No. 324. — *Lath. Syn.* iv. p. 544. 11.

HABITAT

in Europa et America boreali, Groenlandia. — 6 poll. longus.
W.

This bird inhabits, breeds, and continues during the whole year in Carolina, Virginia; and probably it occurs also in Greenland*, since Muller has inserted it in his Danish Zoology. It lives in the forests, and, like all the other titmice, it feeds on insects: it is larger than the preceding species, and differently proportioned; for its bill is shorter, and its tail longer: it weighs about four gros: its plumage is pretty uniform: its forehead is encircled with a sort of black fillet: the rest of the upper side of the head and of the body, and even the quills of the tail and of the wings, are deep grey: the under side of the body is white, mixed with a slight tinge of red, which becomes more perceptible on the inferior coverts of the wings: the bill is black, and the legs lead-coloured.

The female is exactly like the male.

Total length, about six inches; the bill, five lines and a half; the *tarsus*, eight lines and a half; the hind-nail strongest; the tail two inches and a half, consisting of twelve quills: and it exceeds the wings about sixteen lines †.

* The Greenlanders call it *Auingursuk*.

It inhabits the forests in Virginia and the Carolinas: is found in Sweden, and in the west and temperate parts of Russia, but does not reach Siberia. It flies very swift, and has a feeble note.

W.

II.

THE COLLARED TITMOUSE*.

It appears to have a black hood set a little back on its yellow head, the fore part being uncovered; the throat too has a yellow mark, below which is a black collar: all the rest of the under side of the body is also yellow, and all the upper side olive: the bill is black, and the legs brown. The bird is nearly the size of the chaffinch. It inhabits Carolina.

Total length, five inches; the bill, six lines; the *tarsus*, nine lines; the tail twenty-one lines, a little forked, and exceeds the wings ten lines.

LE MESANGE à COLLIER.—*Buff. par Sonn.* lii. p. 302.

THE HOODED TITMOUSE.—*Cat. Car.* i. p. 60.

III.

THE YELLOW-RUMP TITMOUSE *

It creeps on the trees like the woodpeckers, says Catesby; and, like them, it commonly feeds upon insects: its bill is blackish; its legs brown; its throat, and all the under side of its body, grey; its head, and all the upper side of its body, as far as the end of the tail, including the wings and their coverts, of a greenish-brown, excepting always the rump, which is yellow. This yellow rump is the only beauty of the bird, and what alone interrupts the insipid uniformity of its plumage. The female resembles the male: both are nearly as large as

* CHARACTER SPECIFICUS.

PARUS VIRGINIANUS. *P. fusco-olivaceus, subtus griseus, uropygio luteo.*—*Lath. Ind. Orn.* ii. p. 567. No. 15.

PARUS VIRGINIANUS. — *Gmel. Syst.* i. p. 1010. — *Bris.* iii. p. 575. 14.

LA MESAÑGE à CROUPION JAUNE.—*Buff. par Sonn.* lii. p. 304.

YELLOW RUMP.—*Cates. Car.* i. t. 58.

VIRGINIAN TITMOUSE.—*Arct. Zool.* ii. No. 325.—*Lath. Syn.* iv. p. 546. 13.

HABITAT

in Americæ septentrionalis arboribus.—5 pollices longus. W.

the chaffinch, and were observed in Virginia by Catesby.

Total length, about five inches; the bill, five lines; the *tarsus*, eight lines; the tail twenty-one lines, a little forked, consisting of twelve quills, of which the intermediate ones are a little shorter than the lateral ones, and it exceeds the wings about ten lines.

IV.

THE YELLOW-THROATED GREY TITMOUSE*.

Not only the throat, but all the fore part of the neck, is of a fine yellow; and also on each

* CHARACTER SPECIFICUS.

SYLVIA FLAVICOLLIS. *S. grisea*, subtus alba, gutture luteo, fronte superciliis lateribusque colli nigris, fascia alarum duplici alba.—*Lath. Ind. Orn.* ii. p. 518. No. 35.

MOTACILLA FLAVICOLLIS.—*Gmel. Syst.* i. p. 959.

PARUS CAROLINENSIS GRISEUS.—*Bris.* iii. p. 563. 10.

LA MESANGE GRISE à GORGE JAUNE.—*Buff. par Sonn.* lji. p. 306.

YELLOW-THROATED CREEPER.—*Cat. Car.* i. t. 62.

————— WARDLER.—*Arct. Zool.* ii. No. 286.

—*Lath. Syn.* iv. p. 437. 31.

HABITAT

in Carolina.—5½ pollices longa.

W.

side of the head, or rather at the base of the upper mandible, is a small trace of that colour: the rest of the under side of the body is white, with some black streaks on the flanks: all the upper side is of a handsome grey; a black bar covers the face, extends on the eyes, and descends on both sides of the neck, accompanying the yellow mark of which I have spoken: the wings are of a brown-grey, and bear two white spots: the tail is black-and-white; the bill black, and the legs brown.

The female has neither the fine yellow which sets off the plumage of the male, nor the black spots which rise out of the other colours.

This bird is common in Carolina. It weighs only two gros and a half; and yet Brisson supposes it as large as the ox-eye, which is seven or eight gros.

Total length, five inches and one-third; the bill, six lines; the *tarsus*, eight lines and a half; the nails very long, the hind one strongest: the tail twenty-six lines, a little forked, consisting of twelve quills, and exceeds the wings fourteen lines.

V.

THE GREAT BLUE TITMOUSE *

The figure of this bird was communicated by the Marquis Fachinetto to Aldrovandus. It made a part of the coloured drawings of birds, which certain travellers from Japan presented to Pope Benedict XIV. and which were suspected by the sagacious naturalist Willughby, as either imaginary or very inaccurate. But we shall exactly copy the description of Aldrovandus.

Light blue predominates on all the upper part of this bird; and white on the under; a

* CHARACTER SPECIFICUS.

PARUS CYANUS. P. dilute cæruleus, subtus albus, uropygio et vertice cano-albidis, cervices albæ fascia lata, humeris tectricibusque caudæ cæruleis.—*Lath. Ind. Orn.* ii. p. 563. No. 3.

PARUS CYANUS.—*Gmel. Syst.* i. p. 1007.

—— **INDICUS ALDR.**—*Raii Syn.* p. 74. 7.—*Will.* p. 177.

—— **CÆRULEUS MAJOR.**—*Bris.* iii. p. 548. 3.

LA GROSSE MESANGE BLEUE.—*Buff. par Sonn.* lii. p. 308.

AZURE TITMOUSE.—*Arct. Zool.* ii. p. 426. C.—*Id. Sup.* p. 64.—*Lath. Syn.* iv. p. 538. 3.—*Id. Sup.* p. 189.

HABITAT

in Russiæ, Siberiæ, Sueciæ salicetis.—5½ poll. longus. W.

very deep blue is spread on the quills of the tail, and of the wings: the iris is yellow: there is a black spot behind the eyes: the tail is as long as the body, and the legs are black and small, which is not the case in the titmouse: besides, the description shows a certain uniformity different from the design of nature, and which justifies the suspicions of Willughby *.

* A bird, answering nearly to Aldrovandus's description, has lately been discovered in the remote parts of Russia, and described, in the Petersburg Transactions, by Pallas, Falck, and Lepechin. We cannot do better than transcribe Mr. Pennant's account of it.

"AZURE TITMOUSE. With a very short and thick bill; crown, and hind part of the head, of a hoary whiteness; the lower part of the last bounded by a transverse band of dark blue; cheeks white, crossed by a deep blue line, extending beyond the eyes; back, light blue; rump, whitish; under side of the neck, breast, and belly, of a snowy whiteness, with a single dusky spot on the breast: wings varied with rich blue, dusky, and white; tail rather long, of a dusky hue, tipped with white; legs dusky-blue."

"Size of the English Blue Titmouse. The plumage of this elegant species is extremely loose, soft, and of most exquisitely fine texture; and so liable to be raised, that when the bird is sitting, but especially when it is asleep, it appears like a ball of feathers."—

"It inhabits, in great abundance, the northern woods of Siberia and Russia, and about Synbirsk, in the government of Kasan. It is a migratory bird, and appears in winter conversant about the houses in Petersburg: it twitters like the common sparrow, but with a softer and sweeter note."—*Arctic Zoology*, vol. ii. p. 426.

VI.

THE AMOROUS TITMOUSE *†.

China also has its titmice: the present was brought by the Abbé Gallois from the extremity of Asia, and was shown to Commerson in 1769. I have been induced, by the account of this naturalist, to place it, at the close of the list of titmice, from which it manifestly differs by the length and shape of its bill.

The epithet of amorous expresses the warmth of its constitution: the male and female continually caress each other, at least in the cage, where it is their sole occupation: they even wear out their vigour; and if this solacement

* CHARACTER SPECIFICUS.

PARUS AMOROSUS. *P. cæruleo-nigricans, macula alarum longitudinali rufo flavoque dimidiata.* — *Lath. Ind. Orn.* ii. p. 568. No. 17.

PARUS AMATORIUS. — *Gmel. Syst.* i. p. 1015.

LA MESANGE AMOUREUSE. — *Buff. par Sonn.* lii. p. 310.

AMOROUS TITMOUSE. — *Lath. Syn.* iv. p. 546. 15.

HABITAT

in Asia. — $5\frac{1}{2}$ pollices longus.

W.

† Some have called it the *Canoness*, on account of its garb.

banishes the gloom of confinement, it also abridges the period of their life. Commerson does not tell us if the same ardour pervades their other functions, and is displayed in the construction of their nest, their incubation, &c. and whether their brood is as numerous as in the other titmice. In the ordinary course of nature the affirmative is the most probable, though it may indeed be modified by climate, and peculiar instincts.

Their plumage is entirely of a slaty black, which appears equally on the upper and under side of the body, and the uniformity of which is only interrupted by a bar divided by yellow and rufous, placed longitudinally on the wing, and formed by the exterior border of some of the middle quills: this bar has three indentings at its origin, near the middle of the wing, which consists of fifteen or sixteen quills differing little in length.

The Amorous Titmouse weighs three grains; it is of the same shape with the other titmice, and of a middle size; but its tail is shorter, and only five inches and a quarter; the bill eight lines, black at the base, and bright orange at the opposite extremity; the upper mandible exceeding a little the lower, and having its edges slightly indented near the tip; the tongue somewhat truncated at the end, as in the other titmice; the *tarsus*, eight lines; the mid toe the longest, adhering by its first phalanx to the outer toe; the nails forming a semi-circle

by their curvature, the hind one strongest; the alar extent, seven inches and a half; the tail near two inches, a little forked, consisting of twelve quills: it exceeds the wings more than an inch.

VII.

THE BLACK TITMOUSE*.

The Black Titmouse, or the *Parus Cela* of Linnæus, bears a striking resemblance to this species; since the only difference in regard to colours is, that its bill is white, and there is a yellow spot on the superior coverts of the tail. Linnæus says that it is found in the Indies; but he means the West Indies, for Dupratz saw

* CHARACTER SPECIFICUS.

PARUS CELA. P. niger, rostro albo, macula alarum basique caudæ flavis.—*Lath. Ind. Orn.* ii. p. 568. No. 16.

PARUS CELA.—*Gmel. Syst.* i. p. 1015.—*Kalm. Voy.* ii. p. 151.

LA MESANGE NOIRE.—*Buff. par Sonn.* lii. p. 314.

GUIANA TITMOUSE.—*Lath. Syn.* iv. p. 546. 14.

HABITAT

in Guiana.

W.

it in Guiana. Notwithstanding the wide difference of climate, we must consider it as only a variety of the amorous titmouse of China ; but to be more decisive would require a knowledge of its size, proportions, and, above all, of its natural habits.



THE EUROPEAN NUTHATCH.

THE NUTHATCH* †.

The Nuthatch seldom migrates from one country to another; it constantly resides where

* SITTA.

CHARACTER GENERICUS.

Rostrum subulatum, teretiusculum, rectum, porrectum, integerrimum, mandibula superiore paulo longior, apice compresso angulato.

Langus brevis, apice mucronato.

Pedes ambulatorii; digitus posticus elongatus, validus.

CHARACTER SPECIFICUS.

SITTA EUROPEA. S. cinerea, subtus rufescens, reatricibus nigris, quatuor infra apicem albis.—*Lath. Ind. Orn.* i. p. 261. No. 1.

SITTA EUROPEA.—*Gmel. Syst.* i. p. 440.—*Raii Syn.* p. 47. A. A. Will. p. 98. t. 23.—*Bon. Ill.* p. 588. i. t. 29.

SITTELLA, ou TORCHERON.—*Buff. Pl. Ent.* 623. f. 1. —*Reaumur. Hist. Nat.* iii. p. 333. pl. 153. f. 2.

NUTHATCH.—*Bon. Ill.* No. 89. t. 29.—*Will. (Angl.)* p. 170.—*Arct. Zool.* ii. No. 290.—*Lath. Syn.* iii. p. 600.—*Ind. Sup.* p. 117.—*Bon. Ind.* i. p. 126.

HABITAT

in Europa, Asia; in Anglia satis frequens.—5½ pollices longa. W.

it is bred, only in winter it seeks warm aspects, approaches the dwellings, and even visits sometimes the vineyards and the gardens. Perhaps it finds shelter in the same holes where it collects its stores, and probably passes the night; for, when kept in confinement, though it sometimes perches on the bars of the cage, it seeks holes to sleep in, and, if unsuccessful, will repose even in the drawer. It seldom squats

† In Greek, Σιττη or Σιπτη; Arist. Hist. Anim. lib. ix. 1 & 17. Also Τλοτριμουσα, from ὕλη, wood, and τεμνω, to cut; Κιναιδης, from κινω, to move; and Σεισοπυγης, from σειω, to shake, and πυγη, the rump, on account of a motion which it has with its tail: in modern Greek, Κουρκουιστης: in Latin, *Sitta*: in Italian, *Pico*, or *Picchio*, *Ziollo*: in German, *Nussacker*, *Nussauer*, *Nussbicher*, *Nussbichel* (these words signify *nutcracker*), *Meyspecht* (May-spight), *Blau-spechtle* (blue-spightling), *Grosse Baum-Kletter* (great wood-climber): in Swedish, *Noetwaecha*, *Nøtpacka*: in Danish, *Spætmeise*: in Norwegian, *Nat-wacke*, *Edge*, *Eremit*: in Polish, *Dzięcioł*, *Modrawy*.

Most of the names which the moderns have imposed on this bird convey false or incomplete ideas: such are the *May Woodpecker*, *Blue Woodpecker*, *Mason Woodpecker*, *Nutcracker*, *Creeper*, *Wagtail*, &c. This bird strikes with its bill on the bark of trees with more force and noise than even the woodpeckers and titmice, and it has much of the air and aspect of the latter: but it is distinguished from the titmice by the form of its bill, and from the woodpeckers by the form of its tail, its feet, and its tongue. It is discriminated from the creepers by its bill and its habit of cracking nuts; and from the nutcrackers again by its habit of creeping upon trees: it has an alternate motion of the tail upwards and downwards, like the wagtails, but its economy is entirely different.

in the natural position, or with its head erect; it is commonly awry, or even hanging downwards; in this situation it bores the nuts, after fixing them firm in a chink*. It trips on the trees in all directions to catch insects. Aristotle says, that it habitually breaks the eagle's eggs; and indeed, if it could climb to the lofty eyries of the king of birds, it might pierce and eat the eggs, which are not so hard as nuts. But it is idle to assert, that this is what provokes the vengeance of the eagle†, as if a bird of prey needs instigation to plunder and devour weaker birds.

Though the Nuthatch spends a great part of its time in climbing or creeping upon trees, its motions are quicker and nimbler than those of the sparrow; they are also smoother and more connected, for it makes less noise in flying. It commonly lives in the woods, in the most solitary manner; yet if confined in a volery with other birds, sparrows for instance, or finches, it will continue on good terms with them.

In spring, the male has a song, or love-call, *guiric, guiric*, often repeated. The female is long invited, it is said, before she will yield to

* Albin.

† *Hist Anim.* lib. ix. 1. Perhaps the *clamitoria* or *prohibitoria* of Pliny is the same bird: the name *prohibitoria* might allude to the ancient fables with regard to the Nuthatch, and to its use in necromancy. See *Nat. Hist.* lib. x. 14.

the solicitations; but when the union is accomplished, both in concert labour in forming their nest. They fix it in the hole of a tree*; and when they cannot find one that suits them, they make an excavation with their bills, if the wood be worm-eaten: if the external aperture be too large, they contract it with fat earth, and sometimes with dirt, which they mould and fashion, it is said, as a potter would do his clay, and they strengthen it with small stones; and hence are derived the names *mason-woodpecker* and *wipe-pot* †. From the appearance of the outside of the nest, we could hardly suppose it lodged birds.

The hen lays five, six, or seven eggs, of the ordinary shape, of a dirty white ground, and dotted with rusty; the bed is wood-dust, moss, &c. She hatches assiduously, and so ardent is her attachment that she will suffer the feathers to be torn, rather than quit the nest. If it be rummaged with a stick, she bristles with rage, and hisses like a serpent, or rather like a titmouse in the same situation. Nor does she leave her eggs to seek food, but patiently expects the return of the male, who affectionately brings supply. They do not live altogether on ants, like the woodpeckers, but on caterpillars, beetles, gad-flies, and all sorts of insects, and

* Sometimes in the hole of a wall or of a roof, says Linnaeus.

† *Torche-pot*: this word comes from *torche-porteur*, which signifies *wipe-hole*.

the various kinds of nuts *. The flesh of the young ones accordingly, when they are fat, is excellent, and has not the wild taste of the woodpeckers.

The incubation is completed in May †; and after the young are reared, the parents seldom begin a second hatch, but dissolve their union, and live separate during the winter. "The peasants have observed," says Belon, "that the cock beats the hen whenever he finds her after parting; and hence it is become a proverb, that a person who keeps his wife in due order is like a Nuthatch." But the conduct of the husband has no concern, I am confident, in the present case: the female, as she is the last to pair, is probably the first in separating; and when the male meets her after a long absence, he loads her with caresses, and gives vent to rapturous endearments, which inaccurate observers may mistake for harsh usage.

The Nuthatch is silent through the greatest part of the year; its ordinary cry, *ti, ti, ti, ti, ti, ti, ti*, which it repeats as it scrambles round the trees, and quickens the measure more and more. Linnæus asserts, from the testimony of Strom, that it cries also during the night.

* I fed a female six weeks with hemp-seed which other birds had dropped bruised. It has indeed been remarked, that the Nuthatch visits the hemp-fields about the month of September.

† I saw some nestlings by the 10th, and I saw some eggs not hatched by the 15th.

Besides the different cries and the noise which it makes in beating on the bark, the Nuthatch, inserting its bill in a chink, makes another very singular sound, as if the tree were split in two, and which may be heard more than two hundred yards*.

This bird has been observed to hop; to sleep with its head under its wing; to spend the night on the floor of its cage, though there were two roosts where it might have perched. It is said not to frequent springs, and therefore cannot be ensnared by placing lined twigs near these. Schwenckfeld relates that it is often caught by using tallow alone for the bait: and this is another feature of resemblance to the titmice, which, as we have seen, are fond of all fat substances.

The cock weighs near an ounce, and the hen five or six gros only†. In the former, all the upper part of the head and body, and even the two intermediate quills ~~of the tail~~, are blueish-cinereous; the throat and the cheeks whitish; the breast and the belly orange; the

British Zoology. Besides their *toc, toc, toc*, against the wood, these birds rub their bill upon the dry and hollow branches, and make a noise *grrrrro*, which is heard at a very great distance, and might be imagined to proceed from a bird twenty times as large: this I have been assured by an old gamekeeper, who most assuredly had never read the *British Zoology*.

† One dried in the chimney a year, and very well preserved, weighed only two gros and a half.

flanks, the thighs, and near the anus, of a deeper cast, inclined to chesnut; the lower coverts of the tail whitish, edged with rufous, and extending five lines from the end of the tail: there is a black bar which rises from the nostrils, passes over the eyes, and extends behind the ears; the great superior coverts, and the quills of the wings, brown, edged with grey, which is more or less intense; the lateral quills of the tail black terminated with cinereous, the outermost edged with white as far as the middle, and crossed near the end with a spot of the same colour; the three following marked with a white spot on the inside; the bill cinereous above, lighter below; the legs grey; the ground of the feathers blackish-cinereous.

In the female the colours are fainter. I observed one on the third of May, of which all the under side of the body, from the anus to the base of the neck, was unfeathered, as common in her birds.

Total length six inches; the bill ten lines, straight, a little inflated above and below; the two mandibles nearly equal, and the upper one not scalloped; the nostrils almost round, half covered by small feathers, which sprout at the bottom of the bill, and run parallel to its aperture: the tongue is flat, and broader at the base.

VARIETIES of the NUTHATCH.

THE character of this genus of birds seems little affected by the influence of various climates. Its economy and natural habits are ever the same: the upper part always ash-grey, the lower stained with rufous, more or less dilute, and sometimes whitish. The chief difference consists in the size and proportions, and this does not constantly result from climate. After attentively comparing the foreign Nuthatches with the European kinds, I am convinced that they are varieties of the same species. I except one only, which differs in many respects; and, from the little curvature of its bill, seems to form the shade between the nuthatches and the creepers.

I. *THE LITTLE NUTHATCH* *. I must borrow this variety from Belon. According to him, it is much smaller than the common nuthatch: its plumage, its bill, and its feet, are the same. It lives in the woods like the large sort, and is equally solitary. "It is more

* *Sitta Minor*.—*Briss. Lath. Var. A.*

noisy, joyous, and roving," says Belon; "the male is never seen with other company but its female; and if it meets with any other of the species (he means a male), it attacks it, teases it, and contends obstinately till his rival gives way; then cries shrill and with all his vigour, inviting his female, and demanding the prize attached to his victory." To such cases, perhaps, Belon alluded, when he asserted that the voice was louder than that of the ordinary nuthatch.

II. THE CANADA NUTHATCH*. It climbs, says Brisson, and runs upon the trees like the European kind, and differs only by the colour of the fillet, which it has whitish; but it approaches the other by a blackish spot behind the eye. On a near examination, we perceive some diversity in the shades and proportions, which will best be conceived by comparing the figures. It is nearly of the same size with the preceding variety.

Total length, four inches six lines; the bill, seven lines and a half; the *tarsus*, seven lines; the mid toe, six lines and a half, the hind nail the strongest; the alar extent seven inches and a quarter; the tail eighteen lines, consisting of twelve equal quills, and exceeding the wings eight lines.

* *Sitta Canadensis*.—Linn. Gmel. Briss.

Specific character: "Its eyebrows are white."

III. THE BLACK-CRESTED NUTHATCH*. The black crest, and a sort of black and white stripes near the end of the quills of the tail, are the principal differences that distinguish this from the common nuthatch. It has no black fillet; but this is supposed to be lost in the edges of a hood of the same colour, which covers the head. It inhabits Jamaica, where Sloane observed it: it feeds on insects, like the rock manakin, says this philosophical traveller: it is found among the bushes in the savannas: it is so tame, and allows a person to go so near to it, that it is often knocked down with sticks; whence it has been called *the logger-head*. It is nearly of the size of the common nuthatch. Sloane remarks that its head is large.

Total length, five inches five lines; the bill, eleven lines, triangular, compressed, surrounded at the base with little black bristles; the nostrils round; the *tarsus* and mid toe seventeen lines, the hind nail the strongest; the alar extent, ten inches; the tail, two inches and two-thirds.

IV. THE LITTLE BLACK-CRESTED NUTHATCH†. All that Brown informs us with re-

* *Sitta Jamaicensis*.—*Linn. Gmel. & Briss.*

Sitta Major Capite Nigro.—*Ray.*

The Loggerhead.—*Brown & Sloane.*

The Jamaica Nuthatch.—*Lath.*

Specific character: "It has a black cap."

† *Sitta Jamaicensis*, var. 1st.—*Linn.*

Sitta Jamaicensis Minor.—*Bris.*

The Least Loggerhead.—*Brown.*

gard to this bird is, that it inhabits the same country with the preceding; that it is smaller, but is similar in all other respects. Perhaps it was only a young one, not fully grown: the name which Brown applies seems to favour this conjecture.

V. THE BLACK-HEADED NUTHATCH*. Its habits are the same with those of the common nuthatch: it clammers both upwards and downwards: it continues the whole year in its native climate, Carolina. It weighs four gros and three quarters: the upper side of the head and neck is covered with a sort of black cowl, and the lateral quills of the tail are variegated with black and white. In other respects, its plumage is the same with that of the European nuthatch, but has rather more whitish beneath the body.

Total length, five inches and a quarter; the bill, nine lines; the *tarsus*, eight lines and a half; the mid toe nine lines, the hind nail the strongest; the tail nineteen lines, and does not exceed the wings.

VI. THE LITTLE BROWN-HEADED NUTHATCH†. I need only add, that there is a

- * *Sitta Europæa*, 2d var.—*Linn.*
Sitta Carolinensis.—*Briss.*
The Smaller Loggerhead.—*Brown.*
- † *Sitta Pusilla*.—*Lath. Ind.*
The Loggerhead.—*Shane.*
The Small Nuthatch.—*Catesby.*

whitish spot behind the head; that the superior coverts of the wings are brown, and that the lateral quills of the tail are of an uniform black. It is also much smaller than the preceding varieties; and this circumstance, together with the obvious difference of plumage, sufficiently distinguishes it from Sloane's second species of nuthatch, though Brisson seems inclined to confound them. It is only two gros: it continues the whole year in Carolina, where it lives on insects, like the black-headed nuthatch.

Total length, four lines and one-third; the bill, seven lines; the tail fourteen lines, consisting of twelve equal quills, and hardly exceeds the wings.

FOREIGN BIRDS

RELATED TO THE NUTHATCH.

I.

THE GREAT HOOK-BILLED
NUTHATCH*.

It is the largest of the known nuthatches: its bill, though pretty straight, is inflated at the middle, and a little hooked at the end; the nostrils are round; the quills of the tail and of the wings edged with orange on a brown

* CHARACTER SPECIFICUS.

SITTA MAJOR. *S. grisea, subtus albescens, gula alba, remigibus rectricibusque fuscis, margine fulvis.*—*Lath. Ind. Orn.* i. p. 263. No. 6.

SITTA MAJOR.—*Gmel. Syst.* i. p. 442.

SITTA, seu PICUS CINEREUS MAJOR, ROSTRO CURVO.—*Raii Syn.* p. 186. 34.

LA GRANDE SITTELLE à BEC CROCHU.—*Buff. par Sonn.* lii. p. 357.

ANOTHER SORT OF LOGGERHEAD.—*Sloan. Jam.* p. 301.

GREAT NUTHATCH.—*Lath. Syn.* ii. p. 653. 4.

HABITAT

in Jamaica.— $7\frac{1}{2}$ pollices longa.

W.

ground; the throat white; the head and back grey; the under side of the body whitish. Such are the principal properties of the bird. It was observed by Sloane in Jamaica.

Total length, about seven inches and a half; the bill, eight lines and one third; the upper mandible a little protuberant near the middle; the mid toe, eight lines and one third; the alar extent, eleven inches and a quarter; the tail about twenty-three lines.

II.

THE SPOTTED NUTHATCH*.

This is another American nuthatch, with a hooked bill; but differs from the preceding in

* CHARACTER SPECIFICUS.

SITTA NÆVIA. *S plumbea albo maculata, subtus cæruleo-cinerea, lineis longitudinalibus albis, gula alba.*—*Lath. Ind. Orn.* i. p. 263. No. 7.

SITTA NÆVIA.—*Gmel. Syst.* i. p. 442.

LA SITTELLE GRIVELE'E.—*Buff. par Sonn.* lii. p. 359.

WALL-CREEPER OF SURINAM.—*Edw.* t. 346.

SPOTTED NUTHATCH.—*Lath. Syn.* ii. p. 634. 5.

HABITAT

in Surinamo.—6 pollices longa.

W.

size, plumage, and climate : it inhabits Dutch Guiana.

The upper side of the head and of the body of a dull ash-colour; the superior coverts of the wings of the same colour, but terminated with white; the throat white; the breast and all the under side of the body cinereous, and more dilute than the upper side, with white-streaks scattered on the breast and sides, which forms a sort of speckling; the bill and legs brown.

Total length, about six inches; the bill, an inch; the *tarsus*, seven lines and a half; the mid toe, eight or nine lines, longer than the hind toe whose nail is the strongest; the tail, about eighteen lines, consisting of twelve nearly equal quills; exceeds the wings thirteen or fourteen lines.

THE CREEPERS * †.

WE have already treated of several creeping birds, the nuthatches and titmice: we shall see others in the sequel, such as the woodpeckers; but the appellation of *creepers* is appropriated to the genus which we are now to consider. They creep very nimbly on trees, both in ascending and descending; both on the upper and the under side of the branches: they run swiftly along beams, clasping the edge with their little feet. They are distinguished from the woodpeckers by their bill and tongue; and from the titmice by the greater length of their bill; and from the nuthatches by its more slender and hooked form; and accordingly they do not strike the bark with it, like these other birds.

Many foreign species of creepers resemble

* CERTHIA.

CHARACTER GENERICUS.

Rostrum arcuatum, tenue, acutum.

Lingua variis varia.

Pedes ambulatorii.

Cauda pennis duodecim.

† Les Grimpercaux.— Buff.

much the humming-birds ; by their diminutive size, by the rich colours of their plumage, by their slender incurvated bill, only it is of a more lengthened and sharper form, while that of the humming-bird is of an equal thickness throughout, or even slightly inflated at the tip : the legs of the creepers are shorter, their wings longer, and their tail contains twelve quills, though that of the humming-birds has only ten : and, lastly, the tongue of the creepers is not, like that of the humming-birds, composed of two cylindrical half tubes, which, joined together, form an entire tube, and is properly an organ of respiration, and more analogous to the feeler of an insect than the tongue of a bird.

The genus of creepers is also spread through a wider extent than that of the humming-birds. These seem peculiar to the continent of America, and seldom venture farther than the southern parts of Canada ; and at that latitude the breadth of the ocean is too vast to be traversed by a little insect-bird. But the Creeper of Europe penetrating to Denmark, or even beyond, those of Asia and America probably advanced also to the north, so that an easy communication might be found from one continent to the other.

As the Creepers live upon the same insects with the woodpeckers, the nuthatches, and the titmice, and cannot, from the defect of their bill, extract the insects lodged under the bark,

they follow those birds, which they make their providers, and dexterously snatch the little prey. And since insects are their sole subsistence, we may readily suppose that the species are more prolific and varied in hot climates, where such provision abounds, than in cold or temperate climates, which are less favourable to the multiplication of insects. This is an observation of Sonnerat, and it corresponds to facts.

It is a general remark that the plumage of young birds is not so bright as that of adults; but the difference is more striking in the brilliant tribes of the Creepers, the humming-birds, and other small birds that inhabit the immense forests of America. Bajon informs us, that the colours of these are formed very gradually, and do not assume their lustre till after a number of moultings. He adds, that the females are smaller than the males, and inferior in beauty*.

Whatever analogy subsists between the Creepers of the old and of the new continent, they are yet distinct; and I have no doubt but, in time, more important differences will be found both in their exterior appearance and in their natural habits †.

* Mémoires pour servir à l'Histoire de Cayenne, p. 257.

† In Senegal, according to Adanson, there are many species of birds, of which the females are as brilliant as the males.

THE COMMON CREEPER*.

LITTLE animals are commonly the most agile. The Creeper is nearly as small as the crowned wren, and accordingly is perpetually in motion: but the scene of its activity is ex-

* CHARACTER SPECIFICUS.

CERTHIA FAMILIARIS. *C. grisea*, 'subtus alba, remigibus fuscis, decem macula alba.—*Lath. Ind. Orn.* i. p. 280. No. 1.

CERTHIA FAMILIARIS.—*Gmel. Syst.* i. p. 460.—*Phil. Trans.* xvi. p. 124.

CERTHIA F.—*Raü Syn.* p. 47. A. 5.—*Will.* p. 100. t. 23.—*Bris.* iii. p. 603. 1.

LE GRIMPEREAU.—*Buff. Pl. Enl.* 681. f. 1.—*Buff. par Sonn.* lii. p. 370. pl. 54.

COMMON CREEPER.—*Br. Zool.* i. No. 92. t. 39.—*Arct. Zool.* ii. No. 174.—*Lath. Syn.* ii. p. 701.—*Id. Sup.* p. 126.—*Bew. Birds,* i. p. 129.

HABITAT

in Europæ, Asiæ, et Americæ arboribus reptans. In Anglia frequens; in cavis arborum, more Picorum, nidificat.—
5½ pollices longa. W.

† In Greek *Κερθιος*, *Κερθια*, *Κερθιος*; *Arist. Hist. Anim.* lib. ix. 17. In Italian, *Cerzia Cenerina*, *Picchio Passerino*, *Rampichino*: in German, *Baum-lauffer* (tree-runner), *Rinden-kleber* (bark-climber), *Hirngrille* (brain-cricket): in Danish, *Træ Pikke*, *Lichesten*: in Swedish, *Krypare*.

trameely limited; it never migrates, and its ordinary abode is the hole of a tree. From this it emerges in pursuit of the insects harboured in the bark and the moss; and there the female breeds and hatches*. Belon asserts, and almost all the naturalists have repeated it, that the Creeper has about twenty eggs; but he certainly confounded it with the titmice. For my own part, I am confident, both from my own observations and those of many naturalists†, that the hen generally lays only five eggs, and seldom or never above seven: they are cinereous, with points and streaks of a deeper colour, and the shell is pretty hard. It is observed that the hatch is begun early in the spring, which is very probable, since the bird is neither obliged to construct its nest nor to migrate.

Frisch asserts, that they search for insects on walls; but since he was not acquainted with the real wall-creeper, and did not recognise it in Gesner's description, though distinctly characterised, he probably confounded here the two species, especially as the Common Creeper is recluse and lives chiefly in the woods. One was brought to me in the month of January 1773, which had been shot on an acacia in the king's garden; but it was regarded as a curiosity, and the people who worked there the

* Frisch says, that it defends itself stoutly against the nut-hatch when invaded.

† Salerne, Lottinger, Ginnani.

whole year told me that they very seldom saw these birds. Nor are they common in Burgundy or Italy*, though frequent in England†: they are found also in Germany, and as far as Denmark, as I have already remarked. They have a weak cry, which is very shrill and very common. They generally weigh five drachms English, and appear larger than they really are, because their feathers are not laid regularly upon one another, but bristled and disordered, and they are also very long.

The throat of the creeper is pure white, but generally assumes a rusty tint, which is always deeper on the flanks and the remote parts (sometimes all the under side of the body is white), the upper side variegated with rufous, with white, and with blackish; and these colours vary in their brightness and intensity: the head is of a darker cast; the ring about the eyes, and the eyebrows, white; the rump rufous; the quills of the wings brown, the first three edged with grey, the fourteen following marked with a whitish spot, which forms on the wing a transverse bar of the same colour; the last three marked near the tip with a black spot between two white ones: the bill is brown above, and whitish below; the legs grey; the ground of the feathers deep cinereous.

Total length, five inches; the bill, eight lines, slender, hooked, contracting gradually,

* Gerini.

† Willughby.

and terminating in a point: the throat is wide, says Belon; the nostrils very oblong, half covered by a convex membrane, without any small feathers; the tongue pointed and cartilaginous at the tip, shorter than the bill; the *tarsus*, seven lines; the mid toe seven lines and a half, the lateral toes adhering to the middle one by their first phalanx; the hind nail the strongest, and even longer than its toe; the nails in general very long, hooked, and calculated for climbing; the alar extent, about seven inches; the tail twenty-four lines according to Brisson, and twenty-eight according to Willughby: I have found it to be twenty-six: it consists of twelve tapered quills*, the longer ones laid over the shorter, which makes the tail appear narrow; they are all pointed at the tip, and the extremity of the shaft is worn as in the woodpeckers; but being less stiff than in these birds, it exceeds the wings twelve lines: the wings consist of seventeen quills; what is generally reckoned the first, and which is very short, ought not to be reckoned among the quills.

The *œsophagus*, two inches; the intestines, six; the gizzard muscular, lined with a membrane which is not easily detached, and contained portions of insects, but not a single

* Brisson, Willughby, and Linnæus, reckon only ten quills; but their subjects must have been incomplete, for I have counted twelve, as well as Pennant and Mæhring.



FIG 1 THE SMALL CREEPER FROM THE ISLE OF FRANCE

FIG 2 THE SMALL CREEPER FROM GUYANA.

pebble or fragment of a stone: there were slight traces of a *cæcum*, but no gall bladder *.

* It is found also in the north of Asia, and Catesby says it is common in Carolina. W.

VARIETY of the CREEPER.

THE GREAT CREEPER*. It differs only in size; its economy, its plumage, and its structure, are the same as in the common creeper: it seems however less shy and cautious; for Belon mentions the ordinary kind as difficult to catch; but Klein relates, that he once caught one of the great creepers running on a tree.

Lath. var. β .

THE WALL CREEPER*.

ALL the motions that the preceding performs on trees, this performs on walls; it lodges there, and there it climbs, hunts, and breeds: by walls, I mean not only those built by man, but those formed by nature, the huge perpen-

* CHARACTER SPECIFICUS.

CERTHIA MURARIA. *C. cinerea*, tectricibus alarum remigibusque exterius roseis.—*Lath. Ind. Orn.* i. p. 294.

No. 40.

CERTHIA MURARIA.—*Gmel. Syst.* i. p. 473.

———— **MURALIS.**—*Bris.* iii. p. 607. 2. t. 30. f. 1.

PICUS MURARIUS.—*Rai Syn.* p. 46. 1.—*Will.* p. 99. t. 23.
Kram. El. p. 336. 6.

LE GRIMPEREAU de MURAILLE.—*Buff. Pl. Enl.* 372.
f. 1. 2.—*Buff. par Sonn.* lii. p. 378. pl. 154. f. 3.

WALL-CREEPER †.—*Edw.* t. 361.—*Will. (Angl.)* p. 143. t. 23.—*Lath. Syn.* 730. 32.—*Id. Sup.* p. 129.

HABITAT

in Europa australiori, Asia; migratoria: solitaria; turres, arces, murosque frequentans, eosque more Picorum scandens. W.

† In German, *Mauer-specht* (wall-spight), *Kletten-specht* (creeper-spight): in Danish, *Scopoli*: in Polish, *Dzięcioł Murowy*.



THE WALL CREEPER .

dicular rocks*. Kramer remarks, that these birds prefer the haunts of the tombs, and deposit their eggs in human skulls. They fly flapping their wings like the lapwing; and, though they are larger than the common creepers, they are equally lively and active. Flies, ants, and particularly spiders, are their usual food.

Belon supposed this species peculiar to Auvergne; but it occurs in Austria, Silesia, Switzerland, Poland, Lorraine, and particularly the part bordering on Germany, and even in England†, according to some, though others regard it as at least very rare. On the contrary, it is common in Italy, near Bologna and Florence; but much less frequent in Piedmont.

It is chiefly in winter that these birds appear near dwellings; and if we believe Belon, they are heard flying at a great distance in the air, descending from the mountains to lodge on the walls of cities. They keep single, or at least by two and two, like most birds that feed on insects, and though solitary, they are neither weary nor melancholy: so certain it is, that cheerfulness depends more on the original disposition than on the enlivening influence of society!

* In Turin it is called the *mountain woodpecker*; and Schwenckfeld says, that it is commonly seen in citadels built on mountains.

† Edwards thinks, with Ray and Willughby, that it never visits England, at least he never saw it there.

In the male, there is a black mark under the throat, which extends to the fore part of the neck, and distinguishes the sex: the upper side of the head and body is of a pleasant ash colour, the under side of a deeper cast; the small superior coverts of the wings, rose colour; the great ones blackish edged with rose colour; the quills terminated with white, and bordered from their base to the middle with rose colour, which grows more dilute, and almost vanishes on the quills nearest the body; the first five marked on the inside with two spots of white more or less pure, and the nine following with a single fulvous spot; the small inferior coverts next the margin rose-coloured, the others blackish; the quills of the tail blackish, the ~~four~~ mid ones tipped with dirty-grey, and the two outer pairs with white; the bill and legs black.

In the female, the throat is whitish. A subject which I observed had, under its throat, a broad mark of light grey, which descended on the neck, and sent off a branch to each side of the head. The female described by Edwards was larger than the male described by Brisson. In general, this bird is of a size between that of the blackbird and of the sparrow.

Total length, six inches and two-thirds; the bill fourteen lines, and sometimes twenty, according to Brisson; the tongue very pointed, broader at the base, terminated by two appendices; the *tarsus*, ten or twelve lines; the toes

disposed three before and one behind; the mid one nine or ten lines, the hind one eleven; and the chord of the arc formed by the nail alone is six lines; in general all the nails are long, narrow, and hooked; the alar extent, ten lines; the wings consist of twenty quills, according to Edwards, and of nineteen, according to Brisson; and both include the first, which is very short, and ought not to be reckoned a quill; the tail twenty-one lines, consisting of twelve quills nearly equal; it exceeds the wings six or seven lines.

Belon positively asserts, that this bird has two toes before and two behind; but he also says, that the tail of the common creeper is short. The source of both errors is the same: that naturalist considered these birds as related to the woodpeckers, and he ascribed those characters without examining narrowly. Analogy, which so often conducts to great discoveries, frequently misleads in the detail of observation.

FOREIGN BIRDS

OF THE ANCIENT CONTINENT, WHICH ARE RELATED
TO THE CREEPERS.

I SHALL term these birds *Soui-mangas*, the name which they receive in Madagascar. After these, I shall range the birds of the new continent, which bear some analogy to the creepers, but whose habits and economy are very different; and I shall prefer the Indian appellation *guit-guit*, as more expressive than any abstract artificial term. In general the creepers and *soui-mangas* have their bill proportionally longer than the *guit-guits*, and their plumage at least as beautiful, and even equal to that of the most brilliant of the humming-birds. The colours are the softest, the richest, the most dazzling; all the tints of green, of blue, of orange, of red, of purple, heightened by the contrast of various shades of brown and glossy black. We cannot enough admire the glow of these colours, their sparkling lustre, their endless variety, even in the dried specimens which decorate our cabinets. Nature would seem to have formed the feathers of precious stones; of the ruby, of the emerald, the amethyst, and the topaz. How enchanting, could we view the birds themselves! their plumage in all its

freshness, animated by the breath of life, embellished by all that dazzles in the magic of the prism, changing its reflections with each quick movement, and darting new colours or new flame: To study Nature in her minute, as in her grand productions, we ought to contemplate her in the state of freedom, before the hand of man has interfered.

There are many soui-mangas living with the Dutch bird-catchers at the Cape of Good Hope: the only food offered is sugared water: the flies, which abound in that climate, and torment Dutch cleanliness, supply the rest. These birds are alert in seizing them, and none escape that enter their volery. This additional food seems necessary to their support: for they soon die on board ships, where there are fewer insects. The Viscount Querhoënt, to whom we are indebted for these remarks, could never keep them alive above three weeks.

I.

THE SOUI-MANGA*.

The head, the throat, and all the anterior part, are of a fine brilliant green, with a double collar of violet and chesnut; but these colours are not uniform or permanent: the light which plays among the webs of the feathers changes incessantly its shades, from gold-green to deep blue: on each side, below the shoulder, there is a spot of fine yellow; the breast is brown; the rest of the under side of the body faint yellow; the rest of the upper side of the body dusky-olive; the great coverts and quills of the wings brown, edged with olive; those of the tail black, edged with green, except the outermost,

* CHARACTER SPECIFICUS.

CERTHIA MADAGASCARIENSIS. C. olivaceo-viridis nitens, pectore fusco cæruleo castaneoque fasciato abdomine flavescente, humeris macula fulva.—*Lath, Ind, Orn.* i. p. 282. No. 7.

CERTHIA SOUI-MANGA.—*Gmel. Syst.* i. p. 471.

————— MADAGASCARIENSIS VIOLACEA. — *Briss.* iii. p. 638. 18. t. 32. f. 2. 3.

LE SOUI-MANGA.—*Buff. par South.* liii. p. 5.

VIOLET CREEPER.—*Lath. Syn.* ii. p. 705. 7.

HABITAT

in Madagascaria,—4 pollices longa.

W.

which is partly brown-grey : the following one is terminated with the same colour : the bill and legs are black.

The female is rather smaller, and much inferior in beauty : it is olive-brown above, olive bordering on yellow below ; in other respects similar to the male, but inferior in lustre. It is nearly the size of the common wren.

Total length, about four inches ; the bill, nine lines ; the *tarsus*, above six lines ; the middle toe five lines and a half, larger than the hind one ; the alar extent, six inches ; the tail, fifteen lines, consisting of twelve equal quills. and exceeds the wings seven or eight lines.

We may refer, as a variety closely related to this species, the Soui-manga from the island of Luçon *, which I saw in the excellent cabinet of M. Mauduit. Its neck and throat are steel-coloured, with reflections of green, blue, violet, &c. and several collars, which the brilliant play of these reflections seems to multiply. We may, however, distinguish four that are more constant ; the lower blackish-violet, the next chesnut, then brown, and lastly yellow : there are two spots of yellow below the shoulders : the rest of the under side of the body is olive-

* *CERTHIA MANILLENSIS*. -- *Grec!* i. p. 171. -- *Lath.* var. β .

grey; the upper side deep-green, with reflections of blue, violet, &c. and the quills of the wings, the quills and coverts of the tail, are brown of various intensity, with a greenish gloss.

Total length, a little less than four inches; the bill, ten lines; the *tarsus*, seven; the hind nail the strongest; the tail fifteen lines, and square, and exceeds the wings seven lines.

II.

THE RED - BREASTED PURPLE- CHESNUT SOUI-MANGA *.

Seba says that the song of this bird resembles that of the nightingale: the head, the throat,

* CHARACTER SPECIFICUS.

CERTHIA SPERATA. *C. purpurea, subtus coccinea, capite gula uropygionque violaceis.*—*Lath. Ind. Orn. i. p. 283. No. 8.*

CERTHIA SPERATA.—*Gmel. Syst. i. p. 477.*

———— **PHILIPPENSIS PURPUREA.**—*Iris. iii. p. 655. 27. 1. 31. f. 2. 3.*

LE SOUI-MANGA MARRON POURPRE' à POITRINE ROUGE.
—*Buff. par Sonn. liii. p. 9.*

and the fore part of the neck, are variegated with fulvous and glossy-black, changing into violet-blue : the upper side of the neck and of the body, in the fore part, purplish-chesnut ; and, in the hind part, violet, changing into gold-green : the small coverts of the wings the same ; the middle ones brown, terminated with purplish-chesnut ; the rest of the under side of the body, olive-yellow ; the quills and great coverts of the wings brown, edged with rufous ; the quills of the tail blackish, with steel reflections, and edged with violet, changing into gold-green ; the bill black above (yellow, according to Seba), whitish below ; the legs brown (yellowish, according to Seba), and the nails long.

The female differs from the male, being olive-green above, and olive-yellow below ; with the quills of the tail blackish, and the four lateral pairs tipped with grey. These birds are rather smaller than the common creepers.

Total length, four inches ; the bill, eight lines ; the *tarsus*, six ; the mid-toe, five ; the hind one rather shorter ; the alar extent, six inches ; the tail an inch, consisting of twelve quills, and exceeding the wings three lines.

LE GRIMPEREAU des PHILIPPINES. — *Pl. Enl.* p. 246. f. 1. 2.

RED-BREASTED CREEPER. — *Luth. Syn.* ii. p. 706. 8.

HABITAT

in Philippinis. — 4 pollices longa.

W.

VARIETIES OF THE PRECEDING.

1. THE LITTLE CREEPER, or SOUI-MANGA *, the little brown-and-white creeper, or honey-thief, of Edwards, resembles so much the preceding, that I must consider it as a variety of age; its plumage not being formed, and only beginning to assume the reflections. It is white below, and brown above, with some reflections of copper colour: it has a brown streak between the bill and the eye, and white eye-brows: the quills of the wings are of a deeper brown than the back, and edged with lighter colours; the quills of the tail blackish, the outermost terminated with white; the bill and legs brown. Edwards says that it is only half as large as the European creeper.

Total length, three inches and a half; the bill, eight or nine lines; the *tarsus*, five or six; the mid-toe five, rather longer than the hind one; the tail thirteen lines, consisting of twelve equal quills, and exceeds the wings three or four lines.

THE CREEPER, or SOUI-MANGA †

* *Certhia Pusilla*.—*Linn. & Gmel.*

— — — *Indica*.—*Bris.*

† *Certhia Senegalensis*.—*Linn. & Gmel.*

— — — — — *Violacea*.—*Bris.*

The Senegal Creeper.—*Lath.*

with a violet throat and red breast, brought from New Guinea by Sonnerat. Its back, and the small quills of the wings, snuff colour; its rump and tail like burnished steel, and verging on greenish; and the inferior coverts of the tail are of a dirty-green. It is also a native of the Phillippine islands.

III.

THE RED-BREASTED VIOLET SOUI-MANGA*.

Its leading colour is violet; and on this ground the brighter tints of the anterior parts

* CHARACTER SPECIFICUS.

CERTHIA SENEGALENSIS. C. nigro-violacea, vertice gulaque viridi-aureis, pectore coccineo, alis caudaque fuscis.
—*Lath. Ind. Orn.* i, p. 284. No. 10.

CERTHIA SENEGALENSIS.—*Gmel. Syst.* i. p. 477.

————— VIOLACEA.—*Bris.* iii. p. 660. 29.
t. 34. f. 2.

LE SOUI-MANGA VIOLET à POITRINE ROUGE.—*Buff. par Sonn.* liii. p. 15.

SENEGAL CREEPER.—*Lath. Syn.* ii. p. 209. 9.

HABITAT

in Senegala.—5 pollices longa.

W.

appear with advantage: on the throat and the upper side of the head is a brilliant gold-green, heightened with copper reflections: on the breast and the fore part of the neck is a beautiful shining red, the only colour which is seen in those parts, when the feathers are quite regular and composed: each of the feathers, however, consists of three different colours, black at its origin, gold-green at its middle, and red at its extremity; a proof (a thousand such may be adduced) that to describe the tints of the feathers is not sufficient to give an accurate idea of the colours of the plumage. All the quills of the tail and of the wings, the great superior coverts of the wings, and their inferior coverts, brown: the thighs are of a mixed cast, in which the brown seems melted with the violet: the bill is black, and the legs blackish. This bird is nearly of the size of the golden-crowned wren. It is found in Senegal.

Total length, five inches; the bill, ten lines; the *tarsus*, seven lines; the mid-toe five lines and a half, rather longer than the hind one; the alar extent, seven inches and one-third; the tail twenty-two lines, and composed of twelve equal quills: it exceeds the wings ten lines.

IV.

THE PURPLE SOUI-MANGA*.

If this bird had been of a varying gold-green on the head and under the throat, and red, instead of green and yellow, on the breast, it would have been almost exactly like the preceding; or, at least, it would have been more analogous than the collared soui-manga, which has not a shade of purple in its plumage. I cannot conceive why Brisson considers the latter, and the purple creeper of Edwards, as precisely the same, only with different names.

* The Purple Indian Creeper.—*Edwards*. This author says that this bird has the tongue of the colibri; that is, divided at the tip into many filaments. Edwards seems, therefore, not to have been well acquainted with the true structure of the tongue of the colibri.

V.

THE COLLARED SOUI-MANGA * †.

This species, which comes from the Cape of Good Hope, bears some analogy to that of the violet soui-manga: its head is likewise of a gold-green, waving with rose-copper; and this gold-green extends over the throat, the head, and all the upper side of the body; it borders also the intermediate quills of the tail, which

* CHARACTER SPECIFICUS.

CERTHIA CHALYBEA. *C. viridi-nitens, pectore rubro, fascia antica chalybea.*—*Lath. Ind. Orn.* i. p. 284. No. 11.

CERTHIA CHALYBEA.—*Gmel. Syst.* i. p. 475.

——— TORQUATA CAPITIS BONÆ SPEI.—*Bris.* iii. p. 643. 20. t. 32. f. 1.

LE SOUI-MANGA à COLLIER.—*Buff. par Sonn.* liii. p. 19. pl. 155. f. 1.

LE GRIMPEREAU du CAP DE BONNE ESPERANCE.—*Buff. Pl. Enl.* 246. f. 3.

PURPLE INDIAN CREEPER.—*Edw.* t. 265.

COLLARED CREEPER.—*Lath. Syn.* ii. p. 799. 10.

HABITAT

in Philippinis, ad Caput Bonæ Spei.—4½ pollices longa. W.

† Brisson, Linnæus, Gmelin, and Latham, agree to refer the *Purple Indian Creeper* of Edwards to this bird.

are of a glossy-black ; only it is not changeable on the superior coverts. The breast is marked with red, as in the violet soui-manga, only confined to a narrower space, and not raised so high, and forming a sort of cincture, whose upper edge is contiguous to the collar of blue steel colour, waving with green, and about a line in breadth : the rest of the under side of the body is grey, with some yellow speckles on the top of the belly, and on the flanks : the quills of the wings are of a brown-grey : the bill is blackish, and the legs entirely black. The bird is nearly of the size of the violet soui-manga, but differently proportioned.

Total length, four inches and a half ; the bill, ten lines ; the *tarsus*, eight lines and a half ; the mid-toe six lines, and nearly equal to the hind-toe ; the alar extent, six inches and a half ; the tail eighteen lines, consisting of twelve equal quills, and exceeding the wings nine lines.

The female, according to Brisson, differs from the male, the under side of its body being of the same colour with the upper side, only there are yellow speckles on the flanks : according to others, it has also a red cincture, but which falls lower than in the male, and all its other colours are fainter : admitting this, we may regard as the female the soui-manga observed at the Cape of Good Hope, by the Viscount Querhoënt, in January, 1774. In that bird the throat was brown-grey, variegated

with green and blue; the breast decorated with a flame-coloured cincture; the rest of the under side of the body, white-grey; the head and all the upper side of the body brown-grey, variegated with green on the back, and with blue at the origin of the tail; the wings light-brown, with a coat of gold-yellow; the quills of the tail, blackish; the bill and legs, black. The viscount subjoins, that this bird sings prettily; that it lives on insects and the juices of flowers; but that its throat is so narrow that it cannot swallow the larger common flies. Is it not then probable that this was a young bird, and that the true female of the soui-manga is the same with Brisson's creeper from the Cape of Good Hope*, which is uniformly of a brown-grey, deeper above and lighter below, the colour which borders the tail and the wings? Their dimensions also correspond, and both are brought from the African promontory; but time and observation will ascertain the point.

Lastly, we may reckon, as a female of this species, or as one of its varieties, the Philippine creeper of Brisson†, whose plumage, uniform

* *Certhia Capensis*.—*Linn. edit. xiii.*

† *Certhia Philippina*.—*Linn. edit. xiii.* (See art. iii. the note.) I know not on what foundation Linnæus gives to this species two long quills in the middle of the tail: if he saw an individual so formed, it must have been a young one, or an old one in moult, or a female. But I am disposed to think that Linnæus never saw this bird, since he does not describe it, and adds nothing to what others have said.

and without brilliancy, indicates a female, and the middle quills of whose tail are edged with a shining black, waving with gold-green, like the quills of the tail of the collared soui-manga; but, in this female, the reflections are much less bright; it is of a greenish-brown above; with a sulphur cast below; the quills of the wings brown, edged with a lighter colour, and the lateral ones of the tail blackish, terminated with dirty-white.

If the creepers of the East Indies, like those of America, require several years to form their plumage, and if the rich colours be not assumed till after a number of moultings, we need not be surprised that so many varieties are found.

Total length, four inches nine lines; the bill, an inch; the *tarsus*, six lines and a half; the mid-toe, five lines and a half; the hind one almost as long; the alar extent, six inches and a quarter; the tail fifteen lines, consisting of twelve equal quills, and projecting five lines beyond the wings.

VI.

THE PURPLE-BREASTED OLIVE
SOUI-MANGA*.

The most conspicuous colour of its plumage is a deep and very brilliant violet, which spreads below the neck, and on the throat: the rest of the under side of its body is yellow; all the upper side, including the superior coverts of the wings, of a dull olive, and the same

* CHARACTER SPECIFICUS.

CERTHIA ZEYLONICA. *C. pileo viridi, dorso ferrugineo, abdomine flavo, gula uropygioque azureis.*—*Lath. Ind. Orn.* i. p. 285. No. 13.

CERTHIA ZEYLONICA.—*Gmel. Syst.* i. p. 482.

———— **PHILIPPENSIS OLIVACEA.**—*Brisson. iii.* p. 623. 10. t. 34. f. 4.

LE SOUI-MANGA OLIVE à GORGE POURPRE. — *Buff. par Sonn.* liii. p. 25.

LE GRIMPEREAU PREMIER de l'ISLE DE LUÇON.—*Son. Voy.* t. 36. 4.

———— **OLIVE des PHILIPPINES.**—*Pl. Enl.* 576. f. 4.

CEYLONESE CREEPER.—*Lath. Syn.* ii. p. 712. 13.

HABITAT

In insulis Philippinis.—4 pollices longa.

W.

colour borders the quills of the tail and of the wings, and also their great coverts, of which brown is the prevailing colour; the bill is black, and the legs deep cinereous.

Poivre brought this bird from the Philippines; it is nearly of the size of the common wren.

Total length, four inches; the bill, nine or ten lines; the *tarsus*, six lines; the mid-toe, five lines; the hind-toe rather shorter; the alar extent, six inches; the tail fourteen lines, consisting of twelve equal quills, and exceeds the wings six lines.

If the bill were not shorter and the tail longer, I should regard the Madagascar creeper of Brisson* as the female of the soui-manga of this article; it is at least an imperfect or degenerated variety: all the upper part of the body, including the coverts of the wings, is of a dull olive-green, but darkest on the crown of the head, and the same colour borders also the quills of the wings and of the tail: all these quills are brown; the orbits are whitish; the throat and the under side of the body, dun-grey; the legs entirely brown: the bill is blackish. It is nearly as large as the common creeper.

Total length, four inches; the bill, six or seven lines; the *tarsus*, seven lines; the mid-

* *Certhia Olivacea*.—*Linn. & Gmel.*

The Olive Creeper.—*Lath.*

dle-toe five lines and a half, and the hind one rather shorter; the alar extent, six inches and a half; the tail nineteen lines, consisting of twelve equal quills, and exceeds the wings eight lines.

There is a bird in the Philippine Islands which may also be considered as a variety of the same species *: the under side of the body is of a pretty shade of dun-grey, and the upper side yellowish; the breast darker: there is a deep violet bar, which rises from the throat and descends along the neck: the coverts of the wings are of a steel colour, and the same borders the quills of the tail, the rest of which are blackish; the lateral ones are terminated with dirty-white; the quills of the wings, brown; the bill stronger than in the other creepers, and the tongue terminated by two threads, according to Linnæus; the bill and legs black: it is smaller than the common creeper.

Total length, four inches and two-thirds; the bill, nine lines; the *tarsus*, six lines and a half; the *mid-toe*, five lines and a half; the *hind-toe* rather shorter; the alar extent, six inches and a quarter; the tail fifteen lines, consisting of twelve equal quills, and projecting five lines beyond the wings.

* *Certhia Currucaria*.—*Linn. & Gmel.*

—— *Philippensis* Grisea.—*Bris.*

The Grey Creeper.—*Lath.*

Lastly, we may reckon the little creeper from the Philippines* as a secondary variety of the preceding. It is always brown-grey above, and yellow below; it has a violet collar; the quills of the wings are brown-grey, like the upper side of the body; those of the tail are deeper brown; the two outermost pairs are terminated with dirty-white; the bill and the legs are blackish. This bird is much smaller than the former, which it resembles much in regard to plumage, and perhaps it is the least of all the soui-mangas known in the ancient continent; which afford a presumption that it is a young one.

Total length, three inches and two-thirds; the bill, nine lines; the *tarsus*, six lines; the mid-toe four lines and a half; the hind one rather shorter; the alar extent, five inches and two-thirds; the tail fifteen lines, consisting of twelve equal quills, and projects five lines beyond the wings.

- * *Certhia Jugularis*.—Linn. & Gmel.
- *Philippensis Minor*.—Bris.

VII.

THE ANGALA DIAN*.

This bird has also a collar, a line and a half broad, and of a bright scarlet; the small superior coverts of the same hue; the throat, the head, the neck, all the upper side of the body, and the middle coverts of the wings, of a brilliant gold-green: there is a streak of glossy black between the nostril and the eye; the breast, the belly, and all the under side of the body, of the same black, and also the quills of the tail and of the wings, and the greater coverts of the wings: but these large coverts, and the quills of the tail, are bordered with

* CHARACTER SPECIFICUS.

CERTHIA LOTENIA. *C. cærulea*, fascia pectorali rubro-aurea, loris atris.—*Lath. Ind. Orn.* i. p. 286. No. 16.

CERTHIA LOTENIA.—*Gmel. Syst.* i. p. 483.

————. MADAGASCARIENSIS VIRIDIS.—*Bris.* iii. p. 641.
19. t. 33. f. 4. *mas.* f. 5. *femina.*

LE GRIMPEREAU VERD de MADAGASCAR.—*Pl. Enl.* 575.
f. 2. 3.

L'ANGALA-DIAN.—*Buff. par Sonn.* liii. p. 31.

LOTEN'S CREEPER.—*Lath. Syn.* ii. p. 715. 16.

HABITAT

in Zeylona, Madagascaria.—5½ pollices longa.

W.

gold-green: the bill is black, and so are the legs.

Adanson suspects that the bird which Brisson considers as the hen *Angala* is only a young one of the same species before its first moulting. "This seems to appear," he subjoins, "from the number of birds of this kind, and very similar to it, which are found at Senegal, and of which the females are exactly like the males: but the young ones have a great intermixture of grey, which they lose not till they drop their feathers*."

The *Angala* is almost as large as the epicurean warbler: it gives its nest the shape of a cup, like the canary and chaffinch, and scarcely uses any other materials than the down of plants. It lays generally five or six eggs: but it is often driven from its hatch by a sort of large voracious spider, which seizes the brood, and sucks the blood†.

The bird which Brisson regards as a female, and Adanson as a young one, is of a dirty white, interspersed with black spots on the breast, and the rest of the under side of the body, instead of an uniform glossy black; and

* I doubt not that M. Adanson saw at Senegal numbers of females like their males, since he avers it; but we must not thence draw any general rule for all the birds of Africa and of Asia: the gold pheasant of China, the peacock, many species of turtles, of shrikes, of parakeets, &c. found in Africa, are proofs to the contrary.

† Supplement de l'Encyclopedie, au mot *Angala*.

its wings and tail are also of a less brilliant black.

Total length, five inches and a quarter; the bill, fourteen lines; the *tarsus*, eight lines; the middle toe six lines and a half, and larger than the hind one; the alar extent, eight lines; the tail nineteen lines, and consisting of twelve equal quills: it exceeds the wings six or seven lines.

VIII.—

THE IRIS SOUI-MANGA

Our knowledge of this bird is very scanty: it comes from Ceylon: its plumage is green, tinged with all the rich colours, among which

* CHARACTER SPECIFICUS.

CERTHIA OMNIColor. *C. viridi-aurata, variis coloribus nitens.*—*Lath. Ind. Orn.* i. p. 286. No. 17.

CERTHIA OMNIColor.—*Gmel. Syst.* i. p. 483.

AVIS CEYLONICA OMNIColor.—*Seb. Mus.* i. t. 69, f. 5.

LE SOUI-MANGA de TOUTES COULEURS.—*Buff. par Sonn.* liii. p. 35.

GREEN-GOLD CREEPER.—*Lath. Syn.* ii. p. 716. 17.

HABITAT

in Zeylona.—8 fere pollices longa.

W.

that of gold seems to predominate. Seba says, that its young often become the prey of large spiders; a danger to which the Angala also is liable, and even all the small birds that breed in climates inhabited by those formidable insects, and have not skill sufficient to guard the nest from their intrusions.

If we judge from the figure which Seba has given, this bird is seven or eight inches in total length; its bill, about eighteen lines; the tail, two inches and a quarter: in short, it appears to be the largest of the Soui-mangas.

IX.

THE RED-BREASTED GREEN SOUI-MANGA

Sonnerat, who brought this bird from the Cape of Good Hope, tells us that it sings as

CHARACTER SPECIFICUS.

CERTHIA AFRA. C. viridis, abdomine albo, pectore rubro, uropygio cæruleo.—*Lath. Ind. Orn.* i. p. 286. No. 18.

CERTHIA AFRA.—*Linn. Syst.* i. p. 186. 11.—*Gmel. Syst.* i. p. 476.

LE SOUI-MANGA VERT à GORGE ROUGE.—*Buff. par Sonn* liii. p. 37.

RED-BREASTED GREEN CREEPER.—*Edw.* t. 347.

well as the nightingale, and that its voice is even softer. Its throat is of a fine carminé; its belly, white; the head, the neck, and the anterior part of the wings, of a fine gold-green, and silvery; the rump, sky-blue; the wings and tail, snuff-brown; the bill and legs, black.

Total length, nearly four inches and two-thirds; the bill, an inch; the tail eighteen lines, and exceeds the wings about thirteen lines.

AFRICAN CREEPER.—*Lath. Syn.* ii. p. 717. 18.—*Id. Sup.* p. 127.

HABITAT

ad Caput Bonæ Spei.—4½ pollices longa.

W.

X.

THE BLACK, WHITE, AND RED INDIAN CREEPER, or SOU- MANGA*.

This is the appellation which Edwards bestows on this bird, which is nearly of the size

* CHARACTER SPECIFICUS.

CERTHIA CRUENTATA. C. nigro-cærulescens, subtus alba, vertice cervice dorso uropygioque rubris.—*Lath. Ind. Orn.* i. p. 296. No. 51.

of the crowned wren. The white is spread on the throat, and all the lower part, without exception; the black, on the upper part: but on this dark ground, which is slightly glossed with blue, there are scattered four beautiful spots of bright red: the first on the crown of the head, the second behind the neck, the third on the back, and the fourth on the superior coverts of the tail. The quills of the tail and of the wings, the bill, and the legs, are black.

Total length, three inches and a quarter; the bill, five or six lines; the *tarsus*, five lines; the mid toe, four or five lines; the hind toe rather shorter; the tail about an inch, consisting of twelve equal quills, and exceeding the wings by five or six lines.

CERTHIA CRUENTATA.—*Gmel. Syst.* i. p. 478.

———— BENGALENSIS.—*Bris.* iii. p. 663. 31.

LE SOUI-MANGA ROUGE, NOIR, et BLANC.—*Buff. par Sonn.* liii. p. 29.

BLACK, WHITE, AND RED INDIAN CREEPER.—*Edw.* t. 81.

RED-SPOTTED CREEPER.—*Lath. Syn.* ii. p. 736. 40.

HABITAT

in Bengala.— $3\frac{1}{2}$ pollices longa.

• • W.

XI.

THE BOURBON SOUI-MANGÁ

I assign no particular name to this bird, because I suspect that it is either a female, or a young male whose plumage is not fully ripened. It appears the nearest related to the proper Soui-manga, or violet creeper. The upper side of the head and body, greenish-brown; the rump, olive-yellow; the throat, and all the upper side of the body, of a confused grey, which assumes a yellowish cast near the tail; the flanks, rufous; the quills of the tail, blackish; those of the wings blackish, edged with a lighter colour; the bill and legs black.

The dimensions are nearly the same with those of the violet creeper.

* CHARACTER SPECIFICUS.

CERTHIA BORBONICA. *C. viridi-fusca, subtus grisea, lateribus rufis, uropygio flavo.*—*Lath. Ind. Orn.* i. p. 296. No. 52.

CERTHIA BORBONICA.—*Gmel. Syst.* i. p. 471.

LE SOUI-MANGA de l'ISLE DE BOURBON.—*Buff. par Sonn.* liii. p. 41.

LE GRIMPEREAU de l'ISLE DE BOURBON.—*Pl. Enl.* 681. f. 2.

YELLOW-RUMPED CREEPER.—*Lath. Syn.* ii. p. 736. 41.

HABITAT

in insula Borbonica,—5 pollices longa.

W.

THE LONG-TAILED SOUI- MANGAS.

WE are acquainted with only three birds in the ancient continent to which this epithet belongs. Seba mentions also a female of that kind, which had not the long tail; whence it would appear that, in some species at least, this is the attribute of the male. And might not several males already described have attained the same character at the proper age or season? Many subjects which have been figured and engraved are perhaps only females, or young males, or even old ones in moult, when this decoration is lost. For there is no difference between the conformation of the Long-tailed Soui-mangas and the short-tailed ones; and their plumage glows with the same colours.

I.

THE LONG-TAILED VIOLET-
HOODED SOUI-MANGA*.

I see ~~no~~ reason why this bird should have been called the little creeper, unless that the two middle quills of the tail are not so long as in the two others; but if we overlook the tail, this will be found not the smallest of the three. It resembles so strongly the purple-chestnut soui-manga, or red-breasted creeper, that had it not been larger, and its tail differently formed, I should have reckoned them both of the same species, the one having lost its tail in moulting.

* CHARACTER SPECIFICUS.

CERTHIA VIOLACEA. C. rectricibus duabus intermediis longissimis, corpore violaceo-nitente, pectore abdomineque luteis.—*Lath. Ind. Orn.* i. p. 288. No. 21.

CERTHIA VIOLACEA.—*Gmel. Syst.* i. p. 482.

——— LONGICAUDA MINOR CAPITIS BONÆ SPEI.—*Briss.* iii. p. 649. 23. t. 33. f. 6.

LE SOUI-MANGA à LONGUE QUEUE ET à CAPUCHON VIOLET.—*Buff. par Sonn.* liii. p. 44. pl. 155. f. 2.

LE PETIT GRIMPEREAU à LONGUE QUEUE du CAP DE B. E.—*Pl. Enl.* 670. f. 2.

VIOLET-HEADED CREEPER.—*Lath. Syn.* ii. p. 718. 19.

HABITAT

ad Caput Bonæ Spei.—6 pollices et ultra longa.

W.

The Viscount Quérhoënt saw it in its native climate, near the Cape of Good Hope: he informs us that it constructs its nest artfully, and uses no other materials but a silky bur.

The head, the top of the back, and the throat, are of a bright violet, glossed with green; the fore part of the neck also bright violet, but glossed with blue: the rest of the upper side of the body is of an olive-brown, which colour borders the great coverts of the wings, their quills, and those of the tail, which are all brown, more or less deep; the rest of the under side of the body orange, which is more vivid on the anterior parts, and spreads softening into the distant parts. The bird is in a slight degree larger than the common creeper.

Total length, above six inches; the bill, eleven lines and a half; the legs, seven lines and a half; the mid-toe six lines, and a very little longer than the hind one; the alar extent, six inches and one-third; the tail three inches, and consisting of ten lateral tapered quills, and two intermediate ones, which project twelve or fourteen lines beyond the lateral ones, and twenty-seven lines beyond the wings: these two intermediate ones are narrower than the lateral ones, but broader than in the following species.

II.

THE LONG-TAILED SOUI-MANGA*,

Of a Glossy Gold Green.

The breast is red; all the rest of a pretty deep gold green, but glowing and undulating with rose copper; the quills of the tail blackish, edged with the same green; those of the tail, and their great coverts, brown; the lower belly mixed with a little white; the bill black, and the legs blackish.

This species comes from Senegal. In the

* CHARACTER SPECIFICUS.

CERTHIA PULCHELLA. *C. rectricibus daanous intermediis longissimis, corpore viridi-nitente, pectore rubro.*—*Lath. Ind. Orn.* i. p. 288. No. 23.

CERTHIA PULCHELLA.—*Gmel. Syst.* i. p. 481.

———— **LONGICAUDA SENEGALENSIS.**—*Bris.* iii. p. 645. 21. t. 34. f. 3.

LE SOUI-MANGA VERT DORE' CHANGEANT à LONGUE QUEUE.—*Buff. par Sonn.* liii. p. 47.

LE GRIMPEREAU à LONGUE du SENEGAL.—*Pl. Enl.* 67^o. f. 1.

BEAUTIFUL CREEPER.—*Lath. Syn.* ii. p. 719. 20.

HABITAT :

in Senegala.—7 pollices longus.

female the upper side is greenish-brown; the under side yellowish, variegated with brown; the inferior coverts of the tail white, sprinkled with brown and blue; the rest as in the male, except a few shades.

Total length, seven inches and two lines; the bill, eight lines and a half; the *tarsus*, seven lines; the mid toe five lines and a half, longer than the last; the alar extent, six inches and a quarter; the tail four inches three lines, consisting of ten lateral quills, nearly equal, and two intermediate ones, which are very long and narrow, and which project two inches eight lines beyond these, and three inches four lines beyond the wings.

III.

THE GREAT GREEN LONG-TAILED SOUI-MANGA*.

This bird inhabits the Cape of Good Hope, where it was observed and kept several weeks

* CHARACTER SPECIFICUS.

CERTHIA FAMOSA. *C. rectricibus duabus intermediis longissimis, corpore viridi-nitente, axillis luteis, loris nigris.*—*Lath. Ind. Orn.* i. p. 288, No. 24.

by the Viscount Querhoënt, who describes it in the following terms : " It is of the size of the linnet; its bill, which is a little incurvated, is fourteen lines long; it is black, and also the feet, which are furnished with long nails, particularly the middle and hinder ones : the eyes are black; the upper and under sides of the body of a very fine brilliant green (glossed with rose copper, Brisson adds), with some feathers of gold-yellow under the wings; the great feathers of the wings and of the tail of a fine black, glossed with violet; the filament of the tail, which is rather more than three inches, is edged with green." Brisson adds, that on each side, between the bill and the eye, there is a streak of velvet black.

In this species the female has also a long tail, or rather a long filament at its tail, but which is shorter, however, than in the male, for it projects only two inches and a few lines

CERTHIA FAMOSA.—*Gmel. Syst.* i. p. 481.

———— **LONGICAUDA CAPITIS BONÆ SPEI.**—*Bris.* iii. p. 647. 22. t. 34. f. 1.

LE GRAND SOUI-MANGA VERT à LONGUE QUEUE.—*Buff. par Sonn.* liii. p. 49.

LE GRIMPEREAU à LONGUE QUEUE du CAP DE B. E.—*Pl. Enl.* 83. f. 1.

FAMOUS CREEPER.—*Lath. Syn.* ii. p. 720. 21.—*Id. Sup.* p. 128.

HABITAT

ad Caput Bonæ Spei.—9 pollices longus.

beyond the lateral quills: the upper side of the body and of the head greenish-brown, mixed with some feathers of a fine green; the rump green; the great quills of the wings and of the tail almost black, and also the filament or two intermediate quills: the under side of the body is yellowish, with some green feathers on the breast.

IV.

THE CREEPER-BILLED RED-BIRD*.

This and the three following have been reckoned American birds, and would therefore

CHARACTER SPECIFICUS.

CERTHIA COCCINEA. *C. rubra pileo dilutiore, gula juguloque viridibus, remigibus apice cærulescentibus.*—*Lath. Ind. Orn.* i. p. 289. No. 27.

CERTHIA MEXICANA.—*Gmel. Syst.* i. p. 480.

TROCHILUS COCCINEUS.—*Linn. Syst. ed.* vi. p. 29.

CERTHIA MEXICANA RUBRA.—*Bris.* iii. p. 651. 24.

L'OISEAU ROUGE à BEC DE GRIMPÉREAU.—*Buff. par Sonn.* liii. p. 51.

RED-CREEPER.—*Lath. Syn.* ii. p. 721. 23.

HABITAT

in Mexico.—4½ pollices fere longa.

range with the guit-guits; but as from their conformation, and particularly the length of their bill, they are more related to the soui-mangas, we have placed them between the two tribes. We adopt this plan the more readily, as the climate of these birds rests solely upon the authority of Seba, which naturalists know has little weight, and ever insufficient to balance against the force of analogy. We shall not, however, hurt the received prejudices by changing the name; though that of soui-manga would suit them better.

Red is the prevailing colour in the plumage of this bird, but it has different shades; for the crown of the head is lighter and more brilliant, and that on the rest of the body is deeper. There are some exceptions, however: for the throat and the fore part of the neck are green; the quills of the tail and of the wings are terminated with blueish; the thighs, the bill, and the legs, of a light yellow.

Its voice is said to be pleasant. It is a little larger than our creeper.

Total length, about four inches and a half; the bill, ten lines; the *tarsus*, six lines; the mid toe five lines, rather longer than the hind one; the tail fourteen lines, consisting of twelve equal quills, and projecting about seven lines beyond the wings.

I consider as a variety of this species the black-headed red-bird, which Seba and some others after him have referred to New Spain.

Its proportions are exactly like those of the preceding: the only apparent difference is in the length of the bill, which is ten lines in the preceding, and only seven in this, which would occasion a difference in the total length. But these measures are taken from the figure, and therefore liable to error; especially as the original observer, Seba, seems more struck with its long bill than with that of the other. It is very probable that the designer or engraver took the liberty of shortening it; and an alteration of three or four lines would bring the two birds to an almost perfect identity. There are some differences in the plumage, which alone induced me to distinguish it as a variety.

Its head is of a fine black, and the superior coverts of the wings, gold-yellow; all the rest is light red, except the quills of the tail and wings, which are of a deeper shade. The dimensions precisely as in the preceding bird.

V.

THE CREEPER-BILLED BROWN BIRD*.

The bill of this bird is two-sevenths of the length of the body: the throat and face are of a fine gold-green; the fore part of the neck of a bright red; the small coverts of the wings of a brilliant violet; the great coverts and the quills of the wings and of the tail are brown, tinged with rufous; the middle coverts of the wings, and all the rest both of the upper and under sides of the body, blackish brown; the bill and the legs black.

* CHARACTER SPECIFICUS.

CERTHIA GUTTURALIS. *C. nigricans, sinuipite et gutture viridi-nitente, pectore pupureo.*—*Lath. Ind. Orn.* i. p. 291. No. 32.

CERTHIA GUTTURALIS.—*Gmel. Syst.* i. p. 478.

——— BRASILIENSIS NIGRICANS.—*Bris.* iii. p. 658. 28. t. 33. f. 3.

L'OISEAU BRUN à BEC DE GRIMPEREAU—*Buff. par Sonn.* liii. p. 56. pl. 156. f. 1.

LE GRIMPEREAU du BRÉSIL.—*Pl. Enl.* 578. f. 3.

GREEN-FACED CREEPER.—*Lath. Syn.* ii. p. 723. 24.

HABITAT

in Brasilia.—Ultra pollices 5 longa.

W.

This bird is not larger than the epicurean warbler.

Total length, five inches one-third; the bill, one inch; the *tarsus*, seven lines and a half; the mid toe six inches, and larger than the hind one; the alar extent, eight inches; the tail twenty-one lines, consisting of twelve equal quills, and exceeding the wings about seven lines.

VI.

THE CREEPER-BILLED PURPLE-BIRD

All its plumage, without exception, is of a beautiful uniform purple. Seba applies arbitrarily the name *atototl*, which, in Mexican,

* CHARACTER SPECIFICUS.

CERTHIA PURPUREA. C. corpore toto purpureo.—*Lath. Ind. Orn.* i. p. 291. No. 33.

CERTHIA PURPUREA.—*Gmel. Syst.* i. p. 478.

—— VIRGINIANA PURPUREA.—*Bris.* iii. p. 654. 26.

L'OISEAU POURPRE' à BEC DE GRIMPEREAU.—*Buff. par Sonn.* liii. p. 55.

PURPLE CREEPER.—*Lath. Syn.* ii. p. 723. 25.

HABITAT

in Virginia.—4½ pollices longus.

W.

signifies an aquatic bird; though the present is entirely of a different class. Seba asserts, I know not on what authority, that it sings pleasantly: it is rather larger than the epicurean warbler.

Total length, four inches and a half; the bill, above an inch; the *tarsus*, six lines and a half; the mid toe five lines and a half, rather longer than the hind toe; the tail fourteen lines, and exceeds the wings seven lines.

THE AMERICAN GUIT-GUITS.

GUIT-GUIT is an American name, applied to one or two of this tribe, containing the creepers of the New Continent: I shall use it as a generic appellation. I have already noticed some differences that obtain between them and the humming-birds: I may add that they neither fly in the same manner, nor sip the nectar of flowers. Yet the creoles at Cayenne frequently confound them; and we should be therefore aware of this circumstance in reading the relations of travellers.

I am assured that the Guit-guits of Cayenne never climb upon trees; that they live in flocks with those of their own kind, and also with other birds, such as the little tanagres, nut-hatches, picucullas, &c. and that they feed not only upon insects, but upon fruits and even buds.

THE BLACK-AND-BLUE GUIT-GUIT*.

The face of this beautiful bird is of a brilliant sea-green: there is a bar on the eyes of velvet black; the rest of the head, the throat, and all the under part of the body (without exception, according to Edwards), the lower part of the back, and the superior coverts of the tail, of an ultramarine blue, which is the only colour that appears when the feathers are

* CHARACTER SPECIFICUS.

CERTHIA CAYANEA. *C. cærulea*, fascia oculari humeris alis caudaque nigris, pedibus rubris.—*Lath. Ind. Orn.* i. p. 201. No. 34.

CERTHIA CYANEA.—*Gmel. Syst.* i. p. 483.

———— BRASILIENSIS CÆRULEA.—*Bris.* iii. p. 628. 13. t. 31. f. 5.

GUIRA COEREBE.—*Raii Syn.* p. 83. 11.—*Will.* p. 239.—*Id. (Angl.)* p. 239. ch. 20.

LE GUIT-GUIT NOIR ET BLEU.—*Buff. par Sonn.* li. p. 61. pl. 156. f. 2.

LE GRIMPEREAU du BRÉSIL.—*Pl. Enl.* 83. f. 2.

BLACK-AND-BLUE CREEPER.—*Edw.* t. 114.—*Lath. Syn.* ii. p. 724.—*Id. Sup.* p. 128.

HABITAT

in Brasilia, Cayana.—4½ pollices longa.

regularly disposed, though each has three colours, according to the remark of Brisson, brown at the base, green in the middle, and blue at the extremity; the top of the back, the part of the neck contiguous to the back, and the tail, velvet black; what appears of the wings, when they are closed, is of the same black, except a blue bar, which crosses their coverts obliquely: the inner side of the quills of the wings, and their inferior coverts, are of a fine yellow; so that the wings, which seem entirely black when at rest, appear variegated with black and yellow when displayed or in motion. The inferior coverts of the tail are of a dull black (and not blue, as Brisson represents): the bill is black, and the legs sometimes red, sometimes orange, sometimes yellow, and occasionally whitish.

It appears from this description, that the colours of the plumage are subject to vary in different specimens: in some, the throat is mixed with brown; in others it is black. In general, the distribution of the black seems the most irregular: the blue assumes sometimes a violet tinge.

Marcgrave observed, that the eyes are black; that the tongue is terminated by many filaments; that the feathers on the back are silky; and that the bird is nearly as large as the chaffinch. He saw it in Brazil; but it occurs also in Guiana and Cayenne. In the female the wings have a coat of yellowish-grey.

Total length, four inches and a quarter; the bill, eight or nine lines; the *tarsus*, six or seven; the mid toe six, and a very little longer than the hind toe; the alar extent, six inches and three quarters; the tail fifteen lines, consisting of twelve equal quills, and exceeding the wings three or four lines.

VARIETY of the BLACK-AND-BLUE GUIT-GUIT*.

This variety is found in Cayenne: it differs from the preceding only in the shades of the plumage: the head is of a fine blue: there is a bar on the eyes of a velvet black: the throat, the wings, and the tail, are of the same black: all the rest is of a shining blue, verging upon violet; the bill black, and the legs yellow: the blue feathers which cover the body are of three colours, the same as in the preceding.

With regard to size, it is rather smaller, and the tail especially appears shorter; which would

* CHARACTER SPECIFICUS.

CERTHIA CÆTULRA. *C. cærulea*, fascia oculari gula remigibus rectricibusque nigris.—*Lath. Ind. Orn.* i. p. 292. No. 35.

CERTHIA CÆRULEA. — *Gmel. Syst.* i. p. 474.—*Bris.* iii. p. 626. 12. t. 31. f. 4.

LE VARIÉTÉ' de GUIT-GUIT NOIR ET BLEU. — *Buff. par Sonn.* liii. p. 65.

CERTHIA OF GUIANA.—*Bancr. Guian.* p. 164?

BLUE CREEPER.—*Edw.* t. 21. f. 1.—*Lath. Syn.* ii. p. 725.—*Id. Sup.* p. 128.

HABITAT

in Cayana.—4 pollices longa.

W.

308 BLACK-AND-BLUE GUIT-GUIT, VARIETY.

imply that it is either a young bird, or an adult that has not recovered from moulting; but the alar extent is greater, which precludes this supposition.

It constructs its nest with much art: the outside consists of coarse straw, and stiff stalks of herbs; the inside of softer materials: the shape resembles that of a retort: it is suspended from the end of a pliant branch, and the aperture faces the ground. The bird enters the neck, and creeps into the belly of the retort, which is its proper nest. By this contrivance, the hatch is guarded against the visits of spiders, lizards, and other intruders. Wherever weak animals subsist, unprotected by man, we may infer that they are industrious.

The author of the *Essay on the Natural History of Guiana* * mentions a bird very similar to the preceding, only its tail is of an uncommon length. Must we reckon this a male in its full perfection, or another variety of the same species?

* Bancroft, T.

II.

THE BLACK-HEADED GREEN- AND-BLUE GUIT-GUIT*.

The plumage of this American bird consists of three or four colours, which are disposed in distinct masses, without any intermixture or shading: a velvet black on the throat and head only; deep-blue under the body; bright-green on all the upper side, including the tail and the wings; but the tail is of a deeper shade: the inferior coverts of the wings are cinereous-brown, edged with green, and the bill is whitish.

Total length, five inches and a quarter; the

* CHARACTER SPECIFICUS.

CERTHIA SPIZA. C. viridis subtus cærulea, capite gulaque nigris.—*Lath. Ind. Orn.* i p. 292. No. 36.

CERTHIA SPIZA.—*Gmel. Syst.* i. p. 476.

——— AMERICANA VIRIDIS ATRICAPILLA.—*Bris.* iii. p. 634. 16.

LE GUIT-GUIT VERD ET BLEU à TÊTE NOIRE.—*Buff. par Sonn.* liii. p. 69.

BLACK-HEADED CREEPER.—*Lath. Syn.* ii. p. 726. 28.

HABITAT

in America meridionali.—5½ pollices longa.

W.

310 BLACK-HEADED GREEN-&-BLUE GUIT-GUIT.

bill, nine lines; the *tarsus*, the same length; the middle-toe seven lines, rather longer than the hind-toe; the tail eighteen lines, consisting of twelve equal quills, and exceeding the wings eight or ten lines; the alar extent unknown.

It is nearly as large as the chaffinch. We are not certain in what part of America it occurs: but most probably it inhabits the same regions with the two preceding.

VARIETIES of the BLACK-HEADED GREEN-AND-BLUE GUIT-GUIT*.

1. The BLACK-HEADED GREEN GUIT-GUIT. The head is black, as in the preceding, but not the throat: it is of a beautiful green, as are all the upper and under sides of the body, including the superior coverts of the wings: their quills are blackish, and also those of the tail, but all bordered with green, the only colour that appears when the parts are at rest: the inferior coverts of the wings are brown-cinereous, bordered also with green: the bill is yellowish at its base, blackish above, whitish

CHARACTER SPECIFICUS.

CERTHIA SPIZA. *C. viridis*, capite supra nuchaque nigris.

—*Lath. Ind. Orn.* i. p. 292. No. 36. var. β .

CERTHIA BRASILIENSIS VIRIDIS ATRICAPILLA.—*Bris.*
iii. p. 638. 15.

LE GUIT-GUIT VERD à TÊTE NOIRE.—*Buff. par Sonn.* liii.
p. 71.—*Buff. Pl. Enl.* 578. f. 2.

GREEN BLACK-CAPPED FLYCATCHER.—*Edw.* t. 25.—
Bancr. Guian. p. 182.

BLACK-CAPPED CREEPER.—*Lath. Syn.* ii. p. 727. 28. A.

HABITAT

in Surinamo, Brasilia, Guiana.

W.

below, and the legs are of the same deep lead-colour. The relative dimensions are the same as in the preceding bird, only the tail is rather longer, and exceeds the wings eleven lines; the alar extent is seven inches and a half.

2. The WHITE-THROATED GREEN-AND-BLUE GUIT-GUIT*. The blue is spread on the head, and the small superior coverts of the wings: the throat is white: all the rest of the plumage the same as in the preceding variety, except that in general the green is uniformly lighter, and on the breast are scattered a few spots of a deeper green: the bill is blackish above, white below, according to Brisson; and, on the contrary, whitish above and deep cinereous below, according to Edwards: the legs are yellowish.

* CHARACTER SPECIFICUS.

CERTHIA SPIZA. *C. viridis, gula alba, vertice tectricibusque alarum cæruleis.* — *Lath. Ind. Orn.* i. p. 292. No. 36. var. γ .

CERTHIA BRASILIENSIS VIRIDIS. — *Bris.* iii. p. 631. 14.

LE GUIT-GUIT VERT ET BLEU à GORGE BLANCHE
Buff. par Sonn. liii. p. 75.

LE GRIMPEREAU VERT du BRÉSIL. — *Pl. Enl.* 578. f. 1

BLUE-HEADED GREEN FLYCATCHER. — *Edw.* i. 25. f. 2.

———— CREEPER. — *Lath. Syn.* ii. p. 727. 28. B.

HABITAT

cum priore.

W.

With regard to the dimensions, they are precisely the same as in the preceding bird; and this conformity has made Edwards suspect, that the two belong to the same species.

3. THE ALL-GREEN GUIT-GUIT*. All the under side of the body is deep-green, tinged with blueish, except the rump, which, as well as the throat, and the under side of the body, is of a lighter green, tinged with yellowish: the brown of the wings is here black: the bill and legs are blackish; but there is a little flesh-colour near the base of the lower mandible.

This bird is found in Cayenne, and in Spanish America: it is of the same size with the preceding, and nearly the same proportions, except that the bill is rather shorter, and more similar to that of the sugar-birds.

* CHARACTER SPECIFICUS.

CERTHIA SPIZA. C. corpore toto viridi, subtus dilutiore.—

Lath. Ind. Orn. i. p. 293. No. 36. var. δ .

LE GUIT-GUIT TOUT VERT.—*Buff. par Sonn.* liii. p. 75.

LE GRIMPEREAU VERT de CAYENNE.—*Pl. Enl.* 682. f. 1.

ALL-GREEN CREEPER. — *Edw.* t. 348. — *Lath. Syn.* ii. p. 728 28. C.

HABITAT

in Cayana.

W.

III.

THE SPOTTED GREEN GUIT-GUIT*.

This bird is smaller than the green guit-guits which we have just described, and it is differently proportioned. The upper side of the head and body of a fine green, though somewhat brown (variegated with blue in some subjects): on the throat is a mark of light rufous, enclosed on both sides by two blue bars, which are very narrow, and accompany the lower mandible: the cheeks are variegated with green and whitish; the breast and the under side of the body

* CHARACTER SPECIFICUS.

CERTHIA CAYANA. C. viridis nitida, subtus albo striata, rectricibus viridibus, lateralibus interius nigricantibus.—

Lath. Ind. Orn. i. p. 293. No. 37.

CERTHIA CAYANA. — *Gmel. Syst.* i. p. 475. — *Bris.* iii. p. 636. 17. t. 33. f. 2.

LE GUIT-GUIT VERT TACHETE.—*Buff. par Sonn.* liii. p. 76.

LE GRIMPEREAU VERT TACHETE.—*Pl. Enl.* 682. f. 2.

CAYENNE CREEPER.—*Lath. Syn.* ii. p. 728. 29.—*Id. Sup.* p. 128.

HABITAT

in Cayana.—Ultra 4 pollices longa.

W.

marked with small streaks of three different colours, some blue*, others green, and others white; the inferior coverts of the tail, yellowish; the intermediate quills, green; the lateral ones blackish, edged and terminated with green; the quills of the wings the same; the bill black; between the bill and the eye is a light rufous spot, and the legs are grey.

In the female, the colours are less decided, and the green of the upper side of the body is lighter: it has no rusty cast, neither on the throat, nor between the bill and the eye, and not a single shade of blue in the whole of its plumage. I observed one in which the two bars that accompany the lower mandible were green.

Total length, four inches and two lines; the bill, nine lines; the *tarsus*, six lines; the mid-toe the same length, and exceeding that of the hind-toe; the alar extent, six inches and three-quarters; the tail fifteen lines, consisting of twelve equal quills, and projects five lines beyond the wings.

* In the individual described by M. Koelreuter, there was no blue; but the throat was yellow, as well as the space between the bill and the eye: I should suppose it to be a young male, and not an adult female.

IV.

THE VARIEGATED GUIT-GUIT*.

Nature seems to have taken pleasure in decorating the plumage of this bird with variety and choice of colours: bright red on the top of the head; fine blue on the back of the head; blue and white on the cheeks; two shades of yellow on the throat, the breast, and all the under side of the body; yellow, blue, white, blackish, on the upper side of the body, including the wings, the tail, and their superior coverts. It is said to be an American bird; but the part of that continent which it commonly

* CHARACTER SPECIFICUS.

CERTHIA VARIEGATA. *C. cærulea nigro flavo alboque varia, subtus fulvo-flavescens, vertice rubro-nitente, nucha cærulea.*—*Lath. Ind. Orn.* i. p. 293. No. 38.

CERTHIA VARIEGATA.—*Gmel. Syst.* i. p. 475.

—AMERICANA VARIA.—*Bris.* iii. p. 665. 32.

LE GUIT-GUIT VARIE'.—*Buff. par Sonn.* liii. p. 79.

VARIEGATED CREEPER.—*Lath. Syn.* ii. p. 729. 30.

HABITAT

in America.—5 pollices longa.

W.

inhabits is not assigned. It is nearly as large as the chaffinch.

Total length, five inches ; the bill, nine lines ; the *tarsus*, six lines ; the mid-toe seven lines, rather longer than the hind-toe ; the nails pretty long ; the tail seventeen lines, and exceeds the wings five or six lines.

V.

THE BLACK-AND-VIOLET GUIT-GUIT*.

The throat and fore side of the neck are of a shining violet; the lower part of the back, the superior coverts of the tail, and the small ones of the wings, are violet, bordering on steel colour; the upper part of the neck and back, of a fine velvet black; the belly, the lower coverts of the tail and of the wings, and the great superior coverts of the wings, of a dull black; the top of the head, of a fine gold-green; the breast, purple chesnut; the bill blackish, and the legs brown. This bird is

* CHARACTER SPECIFICUS.

CERTHIA BRASILIANA. C. nigra, vertice viridi-aureo, jugulo tectricibus alarum minoribus uropygioque violaceis, pectore castaneo.—*Lath. Ind. Orn.* i. p. 293. No. 39.

CERTHIA BRASILIANA.—*Gmel. Syst.* i. p. 474.

——— **BRASILIENSIS VIOLACEA.**—*Bris.* iii. p. 661. 30. t. 32. f. 4.

LE GUIT-GUIT NOIR ET VIOLET.—*Buff. par Sonn.* liii. p. 81.

BLACK-AND-VIOLET CREEPER.—*Lath. Syn.* ii. p. 730. 31.

HABITAT

in Brasilia.—3½ pollices longa.

W.

found in Brazil : it is of the size of the crowned wren. •

Total length, three inches five lines ; the bill, seven lines ; the *tarsus*, five lines and a half ; the mid-toe five lines, rather longer than the hind one ; the alar extent, four inches and a quarter ; the tail thirteen lines and a half, consisting of twelve equal quills, and exceeds the wings five or six lines.

VI.

THE SUGAR-BIRD

Its ordinary food is the sweet viscous juice of the sugar cane, which it sucks through the cracks of the stalk : so I have been informed by a traveller who resided many years at Cayenne. In this respect it resembles the humming birds : it is also exceedingly small ; and from the relative length of its wings, it approaches that of Cayenne, though it differs by the length of its legs and the shortness of its tail. I suspect that the Sugar-birds likewise eat insects, though this has not been mentioned.

* CHARACTER SPECIFICUS.

CERTHIA FLAVEOLA. *C. nigra*, subtus uropygioque lutea, superciliis exalbidis, rectricibus lateralibus apice albis.—*Lath. Ind. Orn.* i. p. 207. No. 53.

CERTHIA FLAVEOLA.—*Gmel. Syst.* i. p. 479.

— seu **SACCHARIVORA JAMAICENSIS.**—*Bris.* vi. App. p. 417.

LE SUCRIER.—*Buff. par Sonn.* liii. p. 83.

BLACK-AND-YELLOW CREEPER.—*Edw.* t. 122.—*Lath. Syn.* ii. p. 737.

HABITAT

in Jamaica.

W.

In a male from Jamaica, the throat, the neck, and the upper side of the head and body, were of a fine black, but with some exceptions; for there were white eyebrows, traces of white on the great quills of the wings, from their origin to more than half their length, and also on the tips of all the lateral quills of the tail; the edge of the wings, the rump, the flanks, and the belly, of a fine yellow, which spreads and grows dilute on the lower belly, and becomes whitish on the inferior coverts of the tail.

The species is diffused through Martinico, Cayenne, and St. Domingo, &c. but the plumage varies a little in these different islands, though nearly in the same parallel. In the Sugar-bird of Cayenne*, the head is blackish; there are two white eye-brows, which extend-
ing meet behind the neck: the throat is light ash-grey: the back and the superior coverts of the wings of a deeper ash-grey; the quills of the wings and of the tail ash-grey, bordered with cinereous; the anterior part of the wings bordered with lemon-yellow; the rump yellow; the breast and the under side of the body also yellow; but this colour is mixed with grey on the lower belly: the bill is black, and the legs blueish: the tail projects a very little beyond the wings.

This bird has a very delicate note, *zi, zi,*

* The negroes and creoles of St. Domingo call it *S'couri*.

and, like the humming-bird, also sucks the juice of plants. Though I have been strongly assured that the one which I have described is a male, I must own that it bears great resemblance to the female from Jamaica *, only this has a whitish throat, and a cinereous cast where the other was blackish; the eyelids yellowish-white; the anterior part of the wings edged with white, and the rump of the same colour with the back; the five pairs of lateral feathers of the tail terminated with white, according to Edwards; the single exterior pair, according to Brisson: lastly, the greatest quills of the wings white, from their origin more than half their length, as in the male.

Sloane says, that this bird has a very short but pleasant warble; but that was probably the female, and the male would still have a sweeter air. The same observer, who dissected one of these birds, tells us that the throat and gizzard were small, the latter not muscular, and lined by an inadhesive membrane; the liver bright red, and the intestines rolled into many circulations.

I have seen a Sugar-bird from St. Domingo, in which the bill and the tail were rather shorter, the eyebrows white, and on the throat a sort of whitish mark, which was larger than in the above female; in all other respects it was exactly similar.

* *Certhia Flaveola*.—Var. 1. *Linn. & Gmel.*

——— *Martinicana*, seu *Saccharivora*.—*Bris.*

The Yellow-bellied Creeper.—*Edw.*

Lastly, Linnæus regards the Bahama creeper of Brisson as the same with the Sugar-birds of Martinico and Jamaica*. Its plumage is indeed very similar; all the upper side is brown, including even the quills of the wings and of the tail; the latter are whitish beneath; the throat is light yellow; the anterior edge of the wings, their inferior coverts, and the rest of the under side of the body, of a deeper yellow as far as the lower belly, which is of the same brown as the back. Further, this bird is larger than the other Sugar-birds; so that it may be regarded as a variety of size and even of climate. The following are the dimensions compared:

	Bahama Sugar-bird.		Jamaica Sugar-bird	
	Inches.	Lines.	Inches.	Lines.
Total length	4	8	—	3 7
Do. not including the tail	0	32	—	0 27
The bill	0	6	—	0 6
The <i>tarsus</i>	0	6½	—	0 7
The middle toe	0	5½	—	0 6
The hind toe	0	5 and more	0	4 or 5
The alar extent	7	0	—	unknown
The tail consisting of 12 quills	2	0	—	1 4
Its excess above the wings	0	15 or 16	0	5 or 6

The name *luscinia*, which Klein bestows on it, shows that he regarded it as a singing-bird; another point of analogy to the Jamaica Sugar-bird.

* *Certhia Flaveola*.—Var. 2. *Linn. & Gmel.*

The Bahama Titmouse.—*Catesby.*

THE FLY - BIRD*.

L'OISEAU MOUCHE †.—*Buff.*

OF all animated beings, the Fly-bird is the most elegant in its form, and the most brilliant in its colours. The precious stones and metals

* TROCHILUS.

CHARACTER GENERICUS.

Rostrum subulato-filiforme apice tubulato, capite longius.
mandibula superior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubulosa.

Pedes graciles, ambulatorii.

Cauda pennis decem.

† In Spanish, *Tomineios*; in Peruvian, *Quinti* or *Quindé*, which name obtains also in Paraguay; in Mexican, *Huitzitzil* or *Hoitzitzil*, *Ourissia* (sun-beam); in Brazilian, *Guainumbi*, which is generic. It is also called *Vicililin* and *Gua-chichil* (flower-sucker) in Mexico. Brisson terms it *Mellisuga* or honey-sucker; Linnaeus *Trochilus*, or little-top. In English it is usually known by the name of *humming-bird*. Mr. Pennant denominates it *honey-sucker*.

[The Mexican appellations of *Hoitzitzil* and *Vicililin* signify *regenerated*; which alludes to a notion entertained by the Indians, that in autumn this bird stuck its bill into the trunk of a tree, and remained insensible during the winter months, till the vernal warmth again waked it to animation, and invited it to its flowery pasture. T.]



FLY-BIRDS OF THE NATURAL SIZE.

polished by our art cannot be compared to this jewel of nature. Her miniature productions are ever the most wonderful; she has placed it in the order of birds, at the bottom of the scale of magnitude; but all the talents which are only shared among the others, nimbleness, rapidity, sprightliness, grace, and rich decoration, she has bestow'd profusely upon this little favourite. The emerald, the ruby, the topaz, sparkle in its plumage, which is never soiled by the dust of the ground. It inhabits the air; it flutters from flower to flower: it breathes their freshness; it feeds on their nectar, and resides in climates where they blow in perpetual succession.

It is in the hottest part of the new world that all the species of Fly-birds are found. They are numerous, and seem confined between the two tropics*; for those which penetrate in summer, within the temperate zones make but a short stay. They follow the course of the sun; with him they advance or retire; they fly on the wings of the zephyr, to wanton in eternal spring.

The Indians, struck with the dazzle and glow of the colours of these brilliant birds, have named them the *beams or looks of the sun*†. The Spaniards call them *tomineos*, on account of their diminutive size, *tomine* signifying a weight

* Laet. Ind. Occid. lib. v. 256.

† Marcgrave.

of twelve grains. "I saw," says Nieremberg, "one of these birds weighed with its nest, and the whole together did not amount to two tomines*." The smaller species do not exceed the bulk of the great gad-fly, or the thickness of the drone. Their bill is a fine needle, and their tongue a delicate thread; their little black eyes resemble two brilliant points; the feathers of their wings are so thin as to look transparent†; hardly can the feet be perceived, so short they are and so slender: and these are little used, for they rest only during the night. Their flight is buzzing, continued, and rapid; Marcgrave compares the noise of their wings to the *whirr* of a spinning-wheel: so rapid is the quiver of their pinions, that when the bird halts in the air, it seems at once deprived of motion and of life. Thus it rests a few seconds beside a flower, and again shoots to another like a gleam. It visits them all, thrusting its little tongue into their bosom, and caressing them with its wings; it never settles, but it never quite abandons them. Its playful inconstancy multiplies its innocent pleasures; for the dalliance of this little lover of flowers never spoils their beauty. It only sips their honey, and its tongue seems calculated for that purpose: it consists of two hollow fibres, forming a small

* Nieremberg, p. 239. Acosta, lib. iv. cap. 37.

† Marcgrave.

canal *, parted at the end into two filaments † : it resembles the proboscis of insects, and performs the same office ‡. The bird protrudes it from its bill, probably by a mechanism of the *os hyoides*, similar to what obtains in the tongue of woodpeckers §. It thrusts it to the bottom of the flowers, and sucks their juices. Such is its mode of subsisting according to all the authors who have written on the subject ¶. One person alone denies the fact; he is Badier ||, who, finding in the œsophagus some portions of insects, concludes that the bird lives on these, and not the nectar of flowers. * But we cannot reject a number of respectable authorities for a single hasty assertion; though the Fly-bird swallow some insects, does it thence follow that it subsists upon them? Nay, must it not necessarily happen, that, sucking the honey from the flowers, or gathering their pollen, it will sometimes swallow the little insects which are entangled? Besides, the rapid waste of its spirits, the consequence of its extreme vivacity and its rapid incessant motion, must continually be recruited by rich nutritious ali-

* Marcgrave.

† Labat, t. iv. 13.

‡ Natural History of Guiana, p. 165.

§ This observation by Buffon has since been confirmed by Vieg. d'Azir, upon the skeleton of a Fly-bird in the cabinet of M. Aubry. W.

¶ Garcilasso, Gomara, Hernandez, Clusius, Nieremberg, Marcgrave, Sloane, Catesby, Feuillée, Labat, Dutertre, &c.

|| Journal de Physique, Janvier 1778, p. 32.

ments: and Sloane, on whose observations I lay the greatest stress, positively avers that he found the stomach of the Fly-bird entirely filled with the pollen, and sweet juice of flowers*.

Nothing can equal the vivacity of these little creatures, but their courage, or rather audacity: they furiously pursue birds twenty times larger than themselves, fix in the plumage, and as they are hurried along strike keenly with the bill, till they vent their feeble rage†: sometimes even they fight obstinately with each other. They are all impatience; if upon alighting in a flower they find it faded, they will pluck the petals with a precipitation that marks their displeasure. Their voice is only a feeble cry, *screp, screp*, which is frequent and reiterated‡. They are heard in the woods at the dawn of the morning§, and as soon as the sun begins to gild the summits of the trees, they take wing and disperse in the fields.

They are solitary || ¶; and indeed, fluttering irregularly in the breeze, they could hardly as-

* Nat. Hist. Jamaica, p. 307.

† Browne, p. 475; Charlevoix, *Nouvelle France*, t. iii. p. 158; Duteftre, t. ii. p. 263.

‡ Marcgrave compares this note, for its continuance, to that of the sparrow, p. 196.

§ Marcgrave, p. 196.

|| Philosophical Transactions, No. 200, art. 5.

¶ Sonnini denies this assertion, and says that he has often seen several of them together flying about over the same shrubs, in the middle of the plantations in French Guiana. W.

sociate. But the power of love surmounts the elements, and, with its golden chains, it binds all animated beings. The Fly-birds are seen to pair in the breeding season: their nest corresponds to the delicacy of their bodies; it is formed with the soft cotton or silky down gathered from flowers, and has the consistency and feel of a thick smooth skin. The female performs the work, and the male collects the materials*. She applies herself with ardour; selects, one by one, the fibres proper to form the texture of this kindly cradle for her progeny; she smooths the margin with her breast, the inside with her tail; she covers the outside with bits of the bark of the gum-tree, which are stuck to shelter from the weather, and give solidity to the fabric†: the whole is attached to two leaves, or a single sprig of the orange or citron‡, or sometimes to a straw hanging from the roof of a hut§. The nest is not larger than the half of an apricot||, and it is also shaped like a half cup. It contains two eggs, which are entirely white, and not exceeding the bulk of small pease. The cock and hen sit by turns twelve days; on the thirteenth the young are excluded, which are then not larger than flies. "I could never perceive," says Father Dutertre, "how the mother fed them, ex-

* Dutertre, t. ii. p. 262.

† *Id. Ibid.*

‡ Browne.

§ Dutertre.

|| Feuillée, Journal d'Observations, t. i. p. 413.

cept that she presented the tongue covered entirely with honey extracted from flowers *."

We may easily conceive that it is impossible to raise these little flutterers. Those who have tried to feed them with syrups could not keep them alive more than a few weeks: these aliments, though of easy digestion, are very different from the delicate nectar collected from the fresh blossoms. Perhaps honey would have succeeded better.

The method of obtaining them is to shoot with sand, or by means of the *trunk-gun*; they will allow one to approach within five or six paces of them †. They may be caught by placing a twig smeared over with a clammy gum in a flowering shrub. It is easy to lay hold of the little creature while it hums at a blossom. It dies soon after it is caught ‡, and serves to decorate the Indian girls, who wear two of these charming birds as pendants from their ears. The Peruvians had the art of forming their feathers into pictures, whose beauty is perpetually extolled in the older narratives §. Marcgrave, who saw some of these pieces of

* Vieillot says, that the little Fly-birds remain in the nest about seventeen or eighteen days, and do not quit it till their wing-feathers have nearly acquired their full growth. W.

† They are so numerous, says Marcgrave, that a fowler may easily take sixty in a day.

‡ Dutertre and Marcgrave.

§ See Ximenes, who attributes the same art to the Mexicans: Gemelli Carreri, Thevet, Lery, Hernandez, &c.

workmanship, admires their brilliancy and delicacy*.

With the lustre and gloss of flowers, these pretty birds have been supposed to have also the perfume; and many authors have asserted that they have the fragrance of musk. The mistake originated probably from the name applied by Oviedo, of *passer mosquitus*, which would easily be changed into *passer moscatus*†. But this is not the only marvellous circumstance with which their history has been clouded‡: it has been said that they are half birds, half flies, and produced from a fly§; and a provincial of the Jesuits gravely affirms in Clusius, that he was witness to this transformation||. It has been alleged, that, during the winter season, they remain torpid, suspended by the bill from the bark of a tree, and awakened into life when the flowers begin to blow. These fictions have been rejected by intelligent naturalists¶;

* The women of the Sandwich islands make a very elegant collar of the wings of the Fly-bird, which they manage so artfully that it has all the richness and beauty of velvet. W.

† Gesner very justly remarks, that this epithet is derived rather from *musca* (a fly), than from *moschus* (the name in modern Latin for musk).

‡ Dutertre corrects very judiciously many puerile exaggerations; and detects, as usual, the mistakes of Rochefort, t. ii. p. 263.

§ See Nierenberg, p. 240.

|| This Jesuit, says Clusius, made strange relations in natural history. *Exotic*, p. 96.

¶ See Willughby.

and Catesby assures us, that he saw^d them through the whole year at St. Domingo and Mexico, where nature never entirely loses her bloom*. Sloane says the same of Jamaica, only that they are more numerous after the rainy season; and, prior to both, Marcgrave mentioned their being frequent the whole year in the woods of Brazil.

We are acquainted with twenty-four species in the genus of the Fly-bird; and it is probable some have been overlooked. We shall distinguish them by their different denominations, drawn from the most obvious character.

* Nat. Hist. of Carolina, vol. i. p. 65.

THE LEAST FLY-BIRD*.

First Species.

It is congruous to begin with the smallest species, in enumerating the smallest genus. This Least Fly-bird is scarcely fifteen lines in length; its bill is three and a half, its tail four: so that there remains only nine lines for the

* CHARACTER SPECIFICUS.

TROCHILUS MINIMUS. T. rectir. corpore viridi, subtus albedo, rectricibus lateralibus margine exteriori albis.—
Lath. Ind. Orn. i. p. 320. No. 65.

TROCHILUS MINIMUS.—*Gmel. Syst.* i. p. 500.

MELLISUGA.—*Briss.* iii. p. 695. 1. t. 36. f. 1.

GUAINUMBA MINOR CORPORE TOTO CINEREO.—*Raii Syn.* p. 83. 7.

GUAINUMBI SEPTIMA SPECIES.—*Raii Syn.* p. 187. p. 44.
—*Will.* p. 167.

LE PLUS PETIT OISEAU-MOUCHE.—*Buff. Pl. Enl.* 276. f. 1.
—*Buff. par Sonn.* iii. p. 150. pl. 157.

LEAST HUMMING-BIRD.—*Sloan. Jam.* ii. p. 307. 33. t. 261.
f. 1.—*Will. (Angl.)* p. 132. 7.—*Edw.* t. 105.—*Lath. Syn.* ii.
p. 788. 60.

HABITAT

in America meridionali, insulisque vicinis; longitudine
1½ pollicis. W.

head, the neck, and the body. It is smaller, therefore, than some of our flies. All the upper side of the head and body is of a gold-green changing brown, and with reddish reflections; all the under side is of a white-grey. The feathers of the wing are brown, inclining to violet, and this is the general colour of the wings in all the Fly-birds, as well as in the colibris. The bill also and the feet are commonly black, the legs are clothed pretty low with little downy plumules; and the toes are furnished with little sharp curved nails. All of them have six feathers in the tail; Marcgrave mentions only four, which is probably a mistake of the transcriber. The colour of these tail-feathers is, in most of the species, blueish-black, with the lustre of burnished steel. In the female the colours are generally not so bright; it is acknowledged too by the best observers to be rather smaller than the male*. The bill of the Fly-bird is equally thick throughout, slightly swelled at the tip, compressed horizontally and *straight*. This last character distinguishes the Fly-bird from the colibris, which most naturalists, and even Marcgrave, have confounded.

This first and least species is found in Brazil and the Antilles. The bird was sent to us from

* Grew in the Philosophical Transactions, No. 200, art. 5.—Labat, Dutertre.

Martinico with its nest; Edwards received it from Jamaica *.

* Several observers have weighed birds of this species. Sloane found the weight of the smallest was 20 grains. Beireis, quoted by Gmelin, mentions a specimen that weighed only ten. The nest is made of fine cotton; it is round and large for such a diminutive bird. The two eggs which it contains are of a dirty white, and not larger than coriander-seeds.

W.

THE RUBY

Second Species.

IN observing the scale of magnitude, many would occupy the second place. We shall take the Carolina Fly-bird, and denominate it the

* CHARACTER SPECIFICUS.

TROCHILUS COLUBRIS. T. rectir. viridi-aureus, reetricibus nigris, lateralibus tribus ferrugineis apice albis, gula flammea. (mas.).—*Lath. Ind. Orn.* i. p. 312. No. 38.

TROCHILUS COLUBRIS.—*Gmel. Syst.* i. p. 492.

MELLISUGA CAROLINENSIS GUTTURE RUBRO.—*Bris.* iii. p. 716. 13. t. 36. f. 6. mas. f. 5. femina.

GUAINUMBI.—*Raii Syn.* p. 82. 1.—*Will.* p. 65.—*Id.* (Angl.) 230.

LE RUBIS.—*Buff. par Sonn.* liii. p. 154.

AMERICAN TOMINEUS, or HUMMING-BIRD.—*Phil. Trans.* xvii. p. 760. 815.—*Cat. Car.* i. t. 65.—*Kalm. Tr.* i. p. 216.

RED-THROATED HONEY-SUCKER.—*Arct. Zool.* ii. No. 176.

———— **HUMMING-BIRD.**—*Edw.* t. 38. mas. et femina.—*Lath. Syn.* ii. p. 769. 35.

HABITAT

in calidis Americæ regionibus, æstate tantum septentrionalibus, versus hyemem in meridiionalem redux.—3½ pollicē longus.

♀. T. reetricibus subarqualibus, basi ferrugineis apice albis. corpore supra fusco, subtus albedo. (*Femina.*) W.

Ruby. Catesby feebly expresses the lustre and beauty of the colour of its throat, when he calls it a *crimson enamel*: it has the brilliancy and fire of the Ruby. In a side view, it has a gold tinge, and, seen from below, it appears a dull garnet. We may remark that the feathers of the throat are fashioned and disposed like scales, round and detached; which arrangement multiplies the reflections, that play both on the neck and the head of the fly-birds, among all their sparkling feathers. In the present, all the upper side of the body is gold-green, changing into red copper; the breast and the fore-part of the body are mixed with white, grey, and blackish; the two feathers in the middle of the tail are of the colour of the back, and the lateral feathers are purple-brown; Catesby says *copper-colour*. The wing is brown, tinged with violet, which, as we have already observed, is the common colour of the wings in all these birds; so that we may omit them in the subsequent descriptions. The form of the wings is singular: Catesby compares it to the blade of a Turkish scimiter. The first four or five outer quills are long, the next much less so, and those nearest the body are extremely small; which, joined to another circumstance, that the largest are curved outwards, makes the two wings when spread resemble a drawn bow, of which the little body of the bird represents the arrow in the middle.

The Ruby appears in summer in Carolina,

and even in New England; it is the only fly-bird that penetrates into the northern provinces*. Some narratives transport it to Gaspesia†, and Charlevoix says, that he saw it in Canada. But he appears little acquainted with it when he says, that the bottom of its nest *is interwoven with small bits of wood, and that it lays five eggs‡*; and in another place that *its feet are like its bill, very long§*. Little stress can be laid on such evidence. The winter retreat is said to be in Florida||; it breeds in Carolina in summer, and departs when the flowers begin to fade. It extracts its nourishment from the flowers only; “and I have always observed,” says Catesby, “that it never feeds on insects, but entirely on honey-juices¶ **.”

* Catesby and Edwards.

† *Nouvelle Relation de la Gaspésie*, par le R. P. Chretien le Clerque.—*Paris*, 1691, p. 486. The Gaspesians, according to this account, call it *nirido*, bird of heaven.

‡ *Hist. et Descrip. de la Nouv. France*.—*Paris*, 1741, t. III. 158.

§ *Hist. de St. Domingue*.—*Paris*, 1730. p. 31.

|| See *Hist. Gén. des Voy.* t. XIV. p. 456.

¶ *Carolina*, vol. I. p. 65.

** The Ruby measures three inches and four lines. There is a remarkable difference between the male and female of this species. The tail-feathers, which are pointed and unequal in the male, are round near the end, and of an equal length, in the female.

W.

THE AMETHYST*.

Third Species.

ALL the throat and the fore-part of the neck are of a brilliant amethyst, which it is impossible to figure or paint. This is one of the smallest of the fly-birds; its size and form the same with those of the ruby; its tail is also forked. The fore-side of the body is marbled with white, grey, and brown; the upper side is gold-green; the amethyst colour of the throat changes into purple-brown, when the eye is placed lower than the object. The wings

* CHARACTER SPECIFICUS.

TROCHILUS AMETHYSTINUS. T. rectir. viridi-aureus, subtus griseo fuscoque varius, gula colloque inferiore amethystinis, cauda forcipata.—*Lath. Ind. Orn.* i. p. 319. No. 62.

* TROCHILUS AMETHYSTINUS.—*Gmel. Syst.* i. p. 496.

LE PETIT OISEAU-MOUCHE* à QUEUE FOURCHUE.—*Pl. Enl.* 672. f. 1.

L'AMETHISTE.—*Buff. par Sonn.* lüi. p. 160.

AMETHYSTINE HUMMING-BIRD.—*Lath. Syn.* ii. p. 787. 59.

HABITAT

in Cayana.

W.

seem rather shorter than in the other fly-birds, and reach not the two middle feathers of the tail, which are however the shortest, and give it a forked shape*.

* The Amethyst inhabits French Guiana, but it is not very common. W.

THE GOLD-GREEN*.

Fourth Species.

GREEN and gold-yellow sparkle more or less in all the fly-birds; but these fine colours cover the whole plumage of this, with a brilliancy and gloss which the eye cannot enough admire. In certain positions it is pure dazzling gold; in others, it is a glazed green, which is not inferior to the lustre of polished metal. These colours extend over the wings; the tail has the black hue of burnished steel.

To this we shall refer the *All-green Humming-bird* of Edwards. We shall also refer the second species of Marégrave; its singular

* CHARACTER SPECIFICUS.

TROCHILUS VIRIDISSIMUS. T. rectir. viridis vividissimus inauratus, abdomine albo, cauda chalybea.—*Lath. Ind. Orn.* i. p. 319. No. 61.

TROCHILUS VIRIDISSIMUS.—*Gmel. Syst.* i. p. 496.

L'OR VERD.—*Buff. par Sonn.* liii. p. 162.

ALL-GREEN HUMMING-BIRD.—*Lath. Syn.* ii. p. 786. 58.

HABITAT

in Tobago.—2 pollices longa.

♂. T. rectir. viridi aureus, subtus cærulescens.

ALL-GREEN HUMMING-BIRD.—*Edw. t.* 360. f. 1. W.

beauty, its short bill, and the dazzle of gold, and of brilliant and resplendent green, distinguish it sufficiently. Brisson makes this his sixteenth species, under the name of the *Forked-tail Brazilian Honey-sucker*; but he was not aware that Marcgrave represents its tail neither long nor forked. Its *tail is like the former*, says that author; and in the first species the tail is *straight, only an inch long*, and does not exceed the wing.

THE TUFTED-NECK *.

Fifth Species.

THIS name marks a very singular character, which distinguishes this bird from all the rest. Not only its head is ornamented with a pretty long rufous tuft, but on each side of the neck, below the ears, rise seven or eight unequal feathers; the two longest, being six or seven lines, are rufous, and narrow throughout, but the ends a little widened, and tipped with a green dot. The bird erects them, reclining them back; while at rest they lie flat on the neck, as also does the beautiful tuft: but they are all bristled when it flies, and the bird appears quite

* CHARACTER SPECIFICUS.

TROCHILUS ORNATUS. T. rectir. viridi-aureus, subtus fusco-aureus, crista rufa, abdomine infimo vittaque transversa uropygii albis, infra aures utrinque pennis 6 s. 7 elongatis rufis apice macula viridi.—*Lath. Ind. Orn. i. p. 318. No. 58.*

TROCHILUS AURATUS.—*Gmel. Syst. i. p. 497.*

LE HUPECOL.—*Buff. Pl. Enl. 640. f. 3.—Buff. par Sonn. liii. p. 165.*

TUFTED-NECKED HUMMING-BIRD.—*Lath. Syn. ii. p. 784. 55.*

HABITAT

in Cayana.

W.

round. The throat and the fore-side of the neck are of a rich gold-green (if the eye be held much lower than the object, these brilliant feathers appear entirely brown); the head and all the upper side of the body green, with dazzling reflections of gold and bronze, as far as the white bar that crosses the rump; beyond this, to the end of the tail, is spread a shining gold on a brown ground on the outer webs of the quills, and rufous on the inner ones; the under side of the body is gold-green brown; the lower belly, white. The Tufted-neck does not exceed the size of the amethyst; the female resembles it, except that it has no tuft or external ears: the bar of the rump is rusty, and so is the throat; the rest of the under side of the body rufous, shaded with greenish; its back and the upper side of the head are as in the male, green with gold and bronze reflections*.

. . .

* Sonnini says, that the band which separates the back from the rump is wanting in the young bird, and that the feathers on the sides of the neck are much shorter than in the full-grown bird.

W.

THE RUBY TOPAZ*.

Sixth Species.

OF all the birds of the genus, this is the most beautiful, says Marcgrave; and the most elegant: it has the colours and the sparkling fire of the Ruby and the Topaz: the upper side of

* CHARACTER SPECIFICUS.

TROCHILUS MOSCHITUS. T. rectir. viridi-aureus, rectricibus æqualibus ferrugineis, extimis apice fuscis, remigibus nigris.—*Lath. Ind. Orn.* i. p. 316. No. 49.

TROCHILUS MOSCHITUS.—*Gmel. Syst.* i. p. 494.

GUAINUMBI MAJOR.—*Raii Syn.* p. 83. 8.—*Will.* p. 167.
—*Id. (Angl.)* p. 232. 8.

MELLISUGA BRASILIENSIS GUTTURE TOPAZINO.—*Brisson.* iii. p. 609. 3. t. 37. f. 1.

L'OISEAU-MOUCHE à GORGE TOPAZE.—*Pl. Enl.* 227. f. 2.

LE RUBIS TOPAZE.—*Buff. par Sonn.* liii. p. 168.

TROCHILUS WITH A FERRUGINOUS TAIL.—*Bancr. Guian.* p. 168.

RUBY-NECKED HUMMING-BIRD.—*Lath. Syn.* ii. p. 779. 46.

HABITAT

in Brasilia.—3½ pollices longus.

W.

its head and neck is as brilliant as a ruby; the throat, all the fore-side of the neck, in the front view, dazzle like the aurora topaz of Brazil. The same parts, seen a little lower, resemble unburnished gold, and still lower, change into a dull green; the top of the neck and the belly are of a velvet black-brown; the wing is violet-brown; the lower belly white; the inferior coverts of the tail and its quills are of a fine gold-rufous, and tinged with purple; it is edged with brown at the end; the rump is brown, heightened with gold-green; the wings, when closed, do not extend beyond the tail, whose quills are equal. Maregrave remarks that it is broad, and that the bird displays it gracefully in flying. It is pretty large for its kind. Its total length is three inches and from four to six lines; its bill is seven or eight; Maregrave calls this *half an inch*. This beautiful species seems numerous, and has become common in the cabinets of naturalists: Seba says that he received many of them from Curaçoa. We may notice a character which all the fly-birds and colibris have, viz. that the bill is thick feathered at its base, and sometimes as far as the fourth or third of its length.

The female has only a streak of gold, or topaz, on the throat and fore-part of the neck; the rest of the under side of the body is white-grey.

We conceive that the fly-bird represented,

No. 640, fig. 1*, *Planches Enluminées*, is a proximate species, or perhaps the same with this; for the only difference consists in its having a crest, but which is not much raised. In other respects, the resemblance is striking; and, from a comparison of the figures, the latter appears rather smaller and its colours not so deep, though the tints and distributions are essentially the same: so that the one seems to be young, the other adult. Or perhaps it is a variety of climate; since the one comes from Cayenne, the other from Brazil. The *Ruby-crested Humming-bird* given in Edwards's *Gleaning* corresponds exactly with the above-mentioned coloured figure. Frisch has also given the head of this fly-bird, *pl.* 24, on which Brisson has formed his second species, taking, for the female, another figure inserted by Frisch in the same place, and which represents a little

* CHARACTER SPECIFICUS.

TROCHILUS ELATUS. T. rectir. virescente-aureus, rectricibus æqualibus ferrugineis apice nigris, pileo rubro cristato.—*Lath. Ind. Orn.* i. p. 316. No. 50.

TROCHILUS ELATUS.—*Gmel. Syst.* i. p. 499.

MELLISUGA AMERICANA GUTTURE TOPAZINO—*Bris.* iii. p. 697. 2.

L'OISEAU-MOUCHE À GORGE TOPAZE.—*Pl. Enl.* 640. f. 1.

RUBY-CRESTED HUMMING-BIRD.—*Edw.* t. 344. fig. sup.—*Lath. Syn.* ii. p. 780. 47.

HABITAT

in Guiana, Cayana, Tobago, &c.

W.

gold-green fly-bird. But the female of the topaz-breasted fly-bird, whose body is brown, cannot surely be green. In this, as in every other genus of birds, the colours of the female are always duller than those of the male. We may, therefore, with the highest probability, refer the *second all-green fly-bird* of Frisch to the gold-green *.

* There are several varieties of the Ruby Topaz, differing not only in shades but in size.

THE CRESTED FLY-BIRD*.

Seventh Species.

DUTERTRE and Feuillée have taken this bird for a *colibri*; but it is one of the smallest of the fly-birds, since it does not exceed the ruby. Its crest resembles the most brilliant emerald; and this distinguishes it, for the rest of its plumage is dull. The back has green and gold reflexions, on a brown ground; the wing is brown; the tail blackish, and shining like polished steel; all the fore-side of the body is velvet-brown, mixed with a little

* CHARACTER SPECIFICUS.

TROCHILUS CRISTATUS. T. rectir. viridis, abdomine fusco-cinereo, crista carulescente, tibiis pennatis.—*Lath. Ind. Orn.* i. p. 317. No. 56.

TROCHILUS CRISTATUS.—*Gmel. Syst.* i. p. 498.

MELLISUGA CRISTATA.—*Bris.* iii. p. 714. 12. t. 37. f. 2.

L'OISEAU-MOUCHE HUPPE'.—*Buff. Pl. Enl.* 227. f. 1.—

• *Buff. par Sonn.* liii. p. 173.

GREEN STRAIGHT-BILLED HUMMING-BIRD. — *Bancr. Guim.* p. 168.

CRESTED GREEN HUMMING-BIRD — *Edw.* t. 27.—*Lath. Syn.* ii. p. 783. 53.

HABITAT

in Cayana.—3 pollices longa.

W.

gold-green near the shoulders; the wing, when closed, does not exceed the tail. The underside of the bill is covered with little green brilliant feathers as far as the middle. Edwards has delineated the nest. Labat observes that the female has no crest *.

* This bird inhabits Cayenne and Martinique, where it is very common, but Vieillot thinks that it does not occur beyond the 14th degree of north latitude, since it is not found either in Porto Rico or St. Domingo. W.

THE RACKET FLY-BIRD*.

Eighth Species.

Two naked shafts, extending from the two middle feathers of the tail, are terminated with little fans, which gives them the form of rackets. The ribs of all the quills of the tail are very thick, and of a rusty white; the rest is brown, like the wings. The upper side of the body is of a bronze-green, which is the colour common to all the fly-birds; the throat is of a rich emerald-green. The point of the bill is about thirty lines from the end of the true tail; the two shafts extend ten lines far-

* CHARACTER SPECIFICUS.

TROCHILUS PLATURUS. T. rectir. viridi-aureus, gula smaragdina, rectricibus rachi expansa rufo-alba, intermediis duabus setaceis elongatis apice expansis.—*Lath. Ind. Orn.* i. p. 317. No. 55.

TROCHILUS LONGICAUDUS.—*Gmel. Syst.* i. p. 498.

L'OISEAU-MOUCHE à RAQUETTES.—*Buff. par Sonn.* liii. p. 177.

RACKET-TAILED HUMMING-BIRD.—*Lath. Syn.* ii. p. 782. 52.

HABITAT

in Guiana.—Longitudo $2\frac{1}{2}$ pollicum.

W.

ther*. This species is not well known, and seems very rare. We have described it from a specimen in Mauduit's cabinet. It is one of the smallest fly-birds, and, exclusive of the tail, it exceeds not the tufted-neck.

* It appears that Buffon described this bird from an imperfect specimen, since the middle-tail feathers are not the longest, but the two lateral ones, which exceed the others considerably. W.

THE PURPLE FLY-BIRD*.

Ninth Species.

ALL the plumage of this bird is a mixture of orange, purple, and brown; and it is, perhaps, as Edwards observes, the only one of the genus that has not the gold-green on the back. Klein has therefore discriminated it imperfectly by the epithet of *brown-winged*; since brown, with more or less of violet and purple, is the general colour of the fly-birds. The bill is ten lines, which is nearly one-third of its length.

* CHARACTER SPECIFICUS.

TROCHILUS RUBER. T. rectir. rectricibus lateralibus violaceis, corpore testaceo fusco maculato.—*Lath. Ind. Orn.* i. p. 315. No. 48.

TROCHILUS RUBER.—*Gmel. Syst.* i. p. 490.

MELLISUGA SURINAMENSIS.—*Bris.* iii. p. 701. 4.

L'OISEAU-MOUONÉ POURPRE.—*Buff. par Sonn.* liii. p. 179.

LITTLE BROWN HUMMING-BIRD.—*Edw.* t. 32.—*Bancr. Guian.* p. 168.—*Lath. Syn.* ii. p. 778. 45.

HABITAT

in Surinamo, Guiana.—Ultra 3 pollices longa.

W.

THE GOLD CRAVAT

Tenth Species.

THIS seems to be the first species of Marcgrave; for it has a gold streak on the throat, which that author thus describes: "the fore-side of the body is white, mixed under the neck with some feathers of a shining colour." Brisson omits that circumstance in his eighth species, though it is formed upon the descrip-

* CHARACTER SPECIFICUS.

TROCHILUS LEUCOGASTER. T. rectir. viridi-auratus, sub-
tus albus, gula inaurata.—*Lath. Ind. Orn.* i. p. 315.
No. 4ß.

TROCHILUS LEUCOGASTER.—*Gmel. Syst.* i. p. 496.

MELLISUGA CAYANENSIS VENTRE ALBO.—*Bris.* iii.
p. 707. 8. t. 36. 7.

GUAINUMBI prima Species.—*Raii Syn.* p. 82. 1.—*Id.*
p. 187. 42.—*Will.* p. 166.—*Id. (Angl.)* p. 231.

L'OISEAU-MOUCHE à CRAVATE DOREE.—*Buff. Pl. Ent.*
672. f. 3.—*Buff. par Sonn.* liii. p. 181.

LARGER HUMMING-BIRD.—*Sloan. Jum.* p. 308. 39. t. 264.
f. 2.

GOLD-THROATED HUMMING-BIRD.—*Lath. Syn.* ii. p. 777.
43.

HABITAT

in Cayana.— $3\frac{1}{2}$ pollices longus.

W.

tion of Marcgrave's first. Its length is three inches and five or six lines ; all the under side of the body, except the gold streak on the fore side of the neck, is white-grey, and the upper side gold-green. We shall reckon Brisson's ninth species * the female of this, there being no material difference between them.

* *Trochilus Pegasus*.—*Gmel.*

Mellisuga Cayanensis, ventre griseo.—*Bris.*

The Grey-bellied Humming-bird.—*Lath.*

THE SAPPHIRE*.

Eleventh Species.

It is rather above the middle size; the fore-side of the neck and breast is of a rich sapphire-blue, with violet reflections; the throat is rufous; the upper and under sides of the body dull gold-green; the lower belly white; the inferior coverts of the tail rufous; the superior ones of a shining gold-brown; the quills of the tail are gold-rufous, edged with brown; those of the wings brown; the bill is white, except the point, which is black.

* CHARACTER SPECIFICUS.

TROCHILUS SAPPHIRINUS. T. rectir. viridi-auratus, subtus albus, collo inferiore violaceo-sapphirino, gula caudaque rufis.—*Lath. Ind. Orn.* i. p. 313. No. 42.

TROCHILUS SAPPHIRINUS.—*Gmel. Syst.* i. p. 498.

LE SAPHIR.—*Buff. par Sonn.* liii. p. 184.

SAPPHIRE HUMMING-BIRD.—*Lath. Syn.* ii. p. 775. 39.

HABITAT

in America caſſidiore.

℞. T. rectir. pectore sapphirino, abdomine albo, cauda caeruleo-atro nitente.

LE SAPHIR.—*Buff.* vi. p. 27. var.—*Lath. Syn.* ii. p. 775. 39 A.

HABITAT

in Guiana.

W.

THE EMERALD-SAPPHIRE*.

Twelfth Species.

THE two rich colours which decorate this bird deservedly confer upon it the names of those precious stones. A sapphire blue covers the head and throat, and melts admirably into the glazed emerald-green, with gold reflections that cover the breast, the stomach, the circle of the neck, and the back. The bird is middle-sized; it comes from Guadaloupe, and, we believe, has not hitherto been described. We have seen another, brought from Guiana, of the same bulk; but it had not the sapphire throat, and the rest of its body was of a very brilliant glazed green. Both these are deposited

* CHARACTER SPECIFICUS.

TROCHILUS BICOLOR. T. rectir. saturate viridi-auratus, capite colloque inferiore sapphirinis.—*Lath. Ind. Orn.* l. p. 314. No. 43.

TROCHILUS BICOLOR.—*Gmel. Syst.* i. p. 496.

LE SAPHIR EMERAUDE.—*Buff. par Sonn.* liii. p. 186.

SAPPHIRE AND EMERALD HUMMING-BIRD.—*Lath. Syn.* ii. p. 775. 40.

HABITAT

in insula Aquarum Lupiarum.

W.

with the first in the excellent cabinet of Mauduit. The last appears to be a variety, or at least a species nearly related to the first. In both, the lower belly is white; the wing is brown, and exceeds not the tail, which is cut equally and rounded; it is black, with blue reflections; their bill is pretty long, its lower half whitish, and upper black.

THE AMETHYST-EMERALD *.

Thirteenth Species.

THIS fly-bird is above the middle size; it is near four inches long, and its bill is eight lines. Its throat and the fore-part of its neck are emerald-green, brilliant and golden; its breast, its stomach, and the top of its back, are purple-blue amethyst of the utmost beauty: the lower part of the back is gold-green, on a brown ground; the belly is white; the bill

* CHARACTER SPECIFICUS.

TROCHILUS OURISSIA. T. rectirostris viridi-auratus, rectricibus subæqualibus fusco-aureis, remigibus nigris, abdomine cæruleo.—*Lath. Ind. Orn.* i. p. 311. No. 35.

TROCHILUS OURISSIA.—*Gmel. Syst.* i. p. 494.

MELLISUGA SURINAMENSIS PECTORE CÆRULEO.—*Briss.* iii. p. 711. 10.

L'OISEAU-MOUCHE à POITRINE BLEUE.—*Pl. Enl.* 227. f. 3.

L'ÉMERAUDE-AMETHISTE.—*Buff. par Sonn.* liii. p. 188.

GREEN-AND-BLUE HUMMING-BIRD.—*Edw.* t. 35. f. 2.—*Lath. Syn.* ii. p. 766. 32.

HABITAT

in Surinamo.—Vix 4 pollices longa.

W.

blackish; the tail velvet-black, shining like polished steel. To the same species we may refer the *Green-and-blue Humming-bird* of Edwards, and the *Blue-breasted Surinam Honey-sucker* of Brisson. It is figured rather larger in Edwards.

THE CARBUNCLE*.

Fourteenth Species.

A CARBUNCLE red, or deep ruby, is the colour of the throat and breast; the upper side of the head and neck is of a duller red; a velvet black envelopes the rest of the body; the wing is brown, and the tail of a deep gold-rufous. The bird is rather above the middle size; the bill, both above and below, is beset with feathers, through almost one half of its length. It was sent from Cayenne, and seems to be very rare. Mauduit, in whose possession it is, would refer it as a variety to the *Topaz-*

* CHARACTER SPECIFICUS.

TROCHILUS CARBUNCULUS. T. rectir. sericeo-niger, vertice colloque superius obscure rubris, collo inferiore pectoreque flammeo-rubris, rectricibus rufo-aureis. —*Lath. Ind. Orn.* i. p. 317. No. 54.

TROCHILUS CARBUNCULUS.—*Gmel. Syst.* i. p. 498.

L'ESCARBOUCLE.—*Buff. par Sonn.* liii. p. 190.

CARBUNCLE HUMMING-BIRD.—*Lath. Syn.* ii. p. 782. 51.

HABITAT

in Cayana; rarus.

W.

ruby; but the difference between the topaz-yellow and the deep ruby on the throat of these two birds, seems too great to admit this classification. In all other respects, they are very similar.—The preceding species, except the thirteenth, are new, and not described by any naturalist.

THE GOLD-GREEN*.

Fifteenth Species.

THIS is the ninth species of Marcgrave; the whole body, says he, is of a brilliant green, with gold reflections; the upper mandible is black, the lower rufous; the wing is brown; the tail pretty broad, and shines like polished steel. The total length of the bird exceeds somewhat three inches. The under side of the body has not so much green as the back, and is only marked with spots or waves of that colour. The female is rather smaller, as usual in this tribe of birds.

* CHARACTER SPECIFICUS.

TROCHILUS MELLISUGUS. T. rectir. viridi-aureus, rectricibus æqualibus chalybeo-cæruleis, remigibus atro-cærulescentibus, tibiis pennatis.—*Lath. Ind. Orn.* i. p. 313. No. 40.

TROCHILUS MELLISUGUS.—*Gmel. Syst.* i. p. 494.

GUAINUMBI nona Species.—*Raii Syn.* p. 83. 9.—*Will.* p. 167.—*Id. (Angl.)* p. 232. 9.

MELLISUGA CAYANENSIS.—*Bris.* iii. p. 704. 6. t. 36. f. 3.

L'OISEAU-MOUCHE de CAYENNE.—*Pl. Enl.* 276. f. 3.

LE VERT-DORÉ.—*Buff. par Sonn.* liii. p. 192.

CAYENNE HUMMING-BIRD.—*Lath. Syn.* ii. p. 773. 37.

HABITAT

in Cayana.—Vix 3 pollices longa.

W.

THE SPOTTED-NECKED FLY- BIRD

Sixteenth Species.

THIS species is much related to the preceding. It is larger, and, but for that difference, we should have assigned it the same place. Brisson says that it is four inches long, and its bill eleven lines. Its plumage is exactly like that of the preceding.

* CHARACTER SPECIFICUS.

TROCHILUS FIMBRIATUS. T. rectir. viridi-aurens, pennis gulæ jugulique albo fimbriatis, ventre cinereo, rectricibus nigro chalybeis, lateralibus apice griseis.—*Lath. Ind. Orn.* i. p. 312. No. 30.

TROCHILUS FIMBRIATUS.—*Gmel. Syst. j.* p. 493.

MELLISUGA CAYANENSIS GUTTURE NERVO.—*Bris. iii.* p. 706. 7. t. 36. f. 2.

L'OISEAU MOUCHE À GORGE TACHETÉE.—*Buff. Pl. Ent.* 276. f. 2.—*Buff. par Sonn. liii.* p. 195.

SPOTTED-NECKED HUMMING-BIRD.—*Lath. Syn. ii.* p. 772. 36.

HABITAT

in Cayana.—4 pollices longa.

W.

THE EMERALD-RUBY*.

Seventeenth Species.

THIS is much larger than the Carolina Ruby, being four inches four lines in length; its throat is of a sparkling ruby, or, in certain positions, rose-colour; its head, its neck, the anterior and upper parts of its body, emerald-green, with gold reflections; the tail is rufous. It is found both in Brazil and in Guiana †.

• CHARACTER SPECIFICUS.

TROCHILUS RUBINEUS. 'T. rectir. viridi-aureus, gutture rubino nitente, rectricibus rufis, exterius apiceque fusco-viridi-aureo fimbriatis.—*Lath. Ind. Orn.* i. p. 312. No. 37.

MELLISUGA BRASILIENSIS GUTTURE RUBRO.—*Bris.* iii. p. 720. t. 37. f. 4.

L'OISEAU-MOUCHE à GORGE ROUGE de BRASIL.—*Pl. Enl.* 276. f. 4.

LE RUBIS-EMERAUDE.—*Buff. par Sonn.* liii. p. 197.

RUBY-THROATED HUMMING-BIRD.—*Lath. Syn.* ii. p. 768. 34.

HABITAT

in Brasilia, Guiana.

W. *

† This species is one of the rarest and most beautiful. W.

THE EARED FLY-BIRD*.

Eighteenth Species.

We apply the epithet *eared* to this fly-bird, both on account of the remarkable colour of the two pencils of feathers, which extend behind the ears, and on account of their great length, which is twice or thrice that of the small adjoining feathers that cover the neck. They seem only the production of what, in all birds, cover the *meatus auditorius*; they are soft, and their downy fibres not glued together. These are the remarks of Mauduit, and well agree

* CHARACTER SPECIFICUS

TROCHILUS AURITUS. T. rectir. viridi-auratus, subtus albus, tænia infra oculos nigra, macula aurium fasciculari violacea, rectricibus quatuor intermediis nigro-cæruleis, lateralibus albis.—*Lath. Ind. Orn.* i. p. 311. No. 36.

TROCHILUS AURITUS.—*Gmel. Syst.* i. p. 493.

MELLISUGA CAYANENSIS MAJOR.—*Bris.* iii. p. 722. 15. t. 37. f. 3.

L'OISEAU - MOUCHE à OREILLES.—*Buff. par Sonn.* liii. p. 199.

VIOLET EARED HUMMING-BIRD.—*Lath. Syn.* ii. p. 767. 33

HABITAT

in Cayana.—4½ pollices longus.

W.

with his ingenious observation, which we formerly had occasion to mention, viz. that all the feathers which appear superabundant, or, so to speak, parasite, in birds are not peculiarities of structure, but merely the extension and development of parts common to all the others. The Eared Fly-bird is of the first magnitude, being four inches and a half long. Of the two pencils which distinguish the ears, and which consist each of five or six feathers, the one is emerald-green, and the other amethyst-violet; a streak of velvet-black stretches under the eye; all the fore-part of the head and body is of a bright gold-green, which changes on the coverts of the tail into a very lively bright green; the throat and under side of the body are of a fine white; of the tail quills, the six lateral ones are of the same white, the four mid-ones black, inclining to deep blue; the wing is blackish, and the tail projects beyond it nearly one-third of its length. In the female, the pencils and the black streak under the eye are less distinct; in other respects it resembles the male.

THE COLLARED FLY-BIRD*.

Nineteenth Species.

THIS fly-bird is of the first magnitude; it is four inches eight lines in length; its bill ten lines; its head, throat, and neck, of a fine obscure blue, glossed with green; on the back of the neck, and near the back, is a white half-collar; the back is gold-green; the tail white at the end, and edged with black; its two middle quills, and their coverts, gold-green;

* CHARACTER SPECIFICUS.

TROCHILUS MELLIVORUS. T. rectirostris, rectricibus 2 intermediis nigris, lateralibus albis, capite cæruleo, dorso viridi, abdomine albo.—*Lath. Ind. Orn.* i. p. 310. No. 34.

TROCHILUS MELLIVORUS.—*Gmel. Syst.* i. p. 499.

MELLISUGA SURINAMENSIS TORQUATA. — *Bris.* iii. p. 713. 11.

L'OISEAU-MOUCHE à COLIBRI, dit LA JACOBINE.—*Buff. Pl. Enl.* 640. f. 2. — *Buff. par Sonn.* liii. p. 203.

WHITE-BELLIED HUMMING-BIRD.—*Edw.* t. 35. f. 1.—*Lath. Syn.* ii. p. 765. 31.

HABITAT

in Surinamo.—4 pollices longus.

W.

the breasts and sides the same; the belly white. It is probable, on account of this distribution, it has been called *Jacobine*. The two middle feathers of the tail are shorter than the rest, and the wing, when closed, does not project beyond it. The species is found at Cayenne and Surinam.

9.

THE BROAD-SHAFTED FLY-BIRD*.

Twentieth Species.

THIS bird and the preceding are the two largest of the genus. The present is four inches eight lines long; all the upper side of the body is of a faint gold-green; the under-side grey; the middle feathers of the tail are like those of the back; the lateral ones white at the tip, the rest of a brown, resembling polished steel. It is easily distinguished from the other fly-birds by the protuberance of three or four great wing-quills, whose shafts appear swelled and dilated,

* CHARACTER SPECIFICUS.

TROCHILUS LATIPENNIS. T. rectirostris viridis, subtus griseus, remigibus tribus sive quatuor primoribus scapo maxime dilatato incurvo, rectricibus lateralibus fusconitentibus apice albis.—*Lath. Ind. Orn.* i. p. 310. No. 33.

TROCHILUS CAMPYLOPTERUS.—*Gmel. Syst.* i. p. 499.

L'OISEAU-MOUCHE à LARGES TUYAUX.—*Buff. Pl. Enl.* 672. f. 2.—*Buff. par Sonn.* liii. p. 206.

BROAD-SHAFTED HUMMING-BIRD.—*Lath. Syn.* ii. p. 765. 30.

HABITAT

in Cayana; rarior.—4½ pollices longa.

W.

bent near the middle, which gives the wing the shape of a broad sabre. This species is new, and apparently rare, and has not hitherto been described. We saw the specimen in the cabinet of Mauduit, who received it from Cayenne*.

* Sonnini notices this as a very rare bird, he not having seen more than two or three during his stay in French Guiana. W.

THE LONG-TAILED STEEL-COLOURED FLY-BIRD*.

Twenty-first Species.

THE beautiful violet-blue, which covers the head, throat, and neck, would seem to indicate an analogy to the sapphire, did not the length of the tail exhibit too great a difference. The two exterior quills are two inches longer than the two mid ones; the lateral ones continually diminish, which makes the tail very much forked. The bird is dark blue, glistening like

* CHARACTER SPECIFICUS.

TROCHILUS FORCIPATUS. T. curvir. viridi-aureus, capite colloque violaceis, abdomine macula alba, cauda chalybea bifurca.—*Lath. Ind. Orn.* i. p. 304. No. 9.

TROCHILUS MACROURUS.—*Gmel. Syst.* i. p. 487.

MELLISUGA CAYANENSIS CAUDA BIFURCA.—*Bris.* iii. p. 726. 17. t. 36. f. 9.

GUAINUMBI MINOR CAUDA LONGIS. &c. — *Raii Syn.* p. 83. 3. 187. 41.—*Will.* p. 166.—*Id. (Angl.)* p. 231. 3.

L'OISEAU-MOUCHE à LONGUE QUEUE COULEUR D'ACIER BRUNI.—*Buff. par Sonn.* liii. p. 208.

CAYENNE FORK-TAILED HUMMING-BIRD.—*Lath. Syn.* ii. p. 751. 8.

HABITAT

in Cayana.—6 pollices longa.

W.

burnished steel; all the body, both above and below, is of a shining gold-green; there is a white spot on the lower belly; the wings, when closed, reach only to the middle of the tail, which is three inches and three lines; the bill is eleven lines, and the total length is six inches. The entire resemblance between this description and that which Marcgrave gives of his third species, convinces us that they are the same, contrary to the opinion of Brisson, who makes it his twentieth species. But the third species of Marcgrave has a *tail more than three inches long*; whereas the twentieth honey-sucker of Brisson has it only *an inch and six lines*. and this is too wide a difference to occur in the same species. We shall consider the bird of Brisson in the following article. ¶

THE FORKED-TAIL VIOLET FLY-BIRD*.

Twenty-second Species.

BESIDES the difference of size, which, as we have already remarked, obtains between this and the preceding species, there is also a difference of colours. The upper parts of the head and neck are brown, glossed with gold-green, whereas these glisten with blue in Marcgrave's third species. In the present, the back and breast are of a shining violet-blue; in that

* CHARACTER SPECIFICUS.

TROCHILUS FURCATUS. T. curvir. cæruleo-violaceus, vertice collo uropygioque viridi-aureis, remigibus rectricibusque nigris, cauda bifurca.—*Lath. Ind. Orn.* i. p. 304. No. 8.

TROCHILUS FURCATUS.—*Gmel. Syst.* i. p. 486.

MELLISUGA JAMAICENSIS VIOLACEA CAUDA BIFURCA. •
—*Bris.* iii. p. 732. 20. t. 37. f. 6.

L'OISEAU-MOUCHE VIOLET à QUEUE SOURCHUE.—*Buff. Pl. Enl.* 599. 2. var. ?—*Buff. par Sonn.* liii. p. 211.

LESSER FORK-TAILED HUMMING-BIRD.—*Lath. Syn.* ii. p. 751. 7.

HABITAT

in Jamaica, Brasilia, Cayana.—4 pollices longus. W.

of Marcgrave they are gold-green. The throat and the lower part of the back are brilliant gold-green; the small coverts below the wings are of a fine violet, the great ones gold-green; their quills black: those of the tail the same; the two exterior ones are the longest, which makes it forked; it is only an inch and half long; the bird measures four inches.

THE LONG-TAIL FLY-BIRD,

Of Gold, Green, and Blue'

Twenty-third Species.

THE two exterior feathers of the tail of this fly-bird are nearly twice as long as the body, and project above four inches. These feathers and all those of the tail, of which the two middle ones are very short, and not exceeding eight lines, are wonderfully beautiful and mingled, says Edwards, with reflections of green and of gold-blue; the body is green; the wing is purple-brown.—This species occurs in Jamaica.

* CHARACTER SPECIFICUS:

TROCHILUS FORFICATUS. T. curvir. Viridis, reatricibus lateralibus longissimis, pileo reatricibusque cæruleis.—*Lath. Ind. Orn.* i. p. 303. No. 7.

TROCHILUS FORFICATUS.—*Gmel. Syst.* i. p. 486.

MELLISUGA JAMAICENSIS CAUDA BIFURCA.—*Bris.* iii p. 728. 18.

L'OISEAU-MOÛCHE à LONGUE QUEUE, OR, VERT, ET BLEU.—*Buff. par Sonn.* liii. p. 213.

LONG-TAILED GREEN HUMMING-BIRD.—*Edw.* t. 83 —*Brown. Jam.* p. 475.

FORK-TAILED HUMMING-BIRD.—*Lath. Syn.* ii. p. 750. 6.

HABITAT

in Jamaica.—7 pollices et ultra longus.

W.

THE BLACK LONG-TAILED FLY-BIRD *,

Twenty-fourth Species.

THIS fly-bird has a longer tail than any of the rest; the two great feathers are four times as long as the body, which is scarcely two inches; these are also the two outermost; their webs consist of parted downy fibres, and they are black like the crown of the head; the back is gold brown-green; the fore-side of the body

* CHARACTER SPECIFICUS.

TROCHILUS POLYTMUS. T. curvirostris virescens, rectricibus lateralibus longissimis, pileo rectricibusque fuscis.
— *Lath. Ind. Grn.* i. p. 302. No. 4.

TROCHILUS POLYTMUS.—*Gmel. Syst.* i. p. 486.

MELLISUGA JAMAICENSIS ATRICAPILLA CAUDA BIFURCA.—*Bris.* iii. p. 729. 19.

L'OISEAU-MOUCHE à LONGUE QUEUE NOIRE.—*Buff. par Sonn.* liii. p. 215.

LONG-TAILED HUMMING-BIRD.—*Alb.* iii. t. 49.

LONG-TAILED BLACK-CAP H. BIRD.—*Edw.* t. 34.—*Bancr. Guan.* p. 169.

BLACK-CAPPED H. BIRD.—*Lath. Syn.* ii. p. 743. 4.

HABITAT

in America australiori, Jamaica.—9½ pollices longus. W.

green; the wings purple-brown. Albin's figure is a very bad one, and he was much mistaken in supposing this to be the smallest species in the genus; though he says that he found it in Jamaica in its nest, which consisted of cotton.

We find, in the Essay on the Natural History of Guiana, mention of a little humming-bird *with a blue crest*. We are unacquainted with it; and the account of it, and indeed of two or three others, is insufficient to ascertain their species. We may, however, be convinced that the genus of these handsome birds is still richer and more multiplied in nature than we have delineated it.



COLIBRIS, OF THE NATURAL SIZE.

THE COLIBRI *.

WHEN nature bestowed beauty so lavishly on the fly-birds, she neglected not their kindred tribe, the Colibris. Both inhabiting the same climate, fashioned after the same model, and decorated by the same brilliancy of plumage; the same vivacity, the same perpetual flutter of action, and the same habits and economy. As their resemblance is so entire, they have often been confounded under the same name: that of *Colibri* is adopted from the language of the Caribbees. Marcgrave applies to both indifferently the Brazilian appellation, *Guainumbi*. But they are distinguished by an obvious and permanent character: in the Colibris the bill is equal and taper, inflated slightly near the end, and not straight, as in the fly-birds, but curved throughout, and longer also in proportion. Further, the neat and slender form of the Colibris seems to be more lengthened than that of the fly-birds, and they are in general larger; yet there are some little Colibris smaller than the great fly-birds. The Colibris should be

* In the Brazilian language, the Fly-bird and the Colibri have the common name of *Guainumbi*: in Guiana, the Colibri is called in the dialect of Garipana *Toukouki*: and, according to Seba, certain tribes of Indians term it *Ronckjes*.

ranged below the creepers, though they differ in the shape and length of their bill; in the number of the feathers of their tail, there being ten in the former and twelve in the latter; and in the structure of their tongue, which is simple in the latter, but in the former divided into two semi-cylindrical portions, as in the fly-bird.

All naturalists agree that the Colibris and fly-birds have the same manner of living. It has, indeed, been denied that either of these tribes feed on the honey of flowers*. But the reasons already adduced convince us that this assertion is unfounded; and the general resemblance of these birds corroborates the evidence that their mode of subsisting is the same.

It is no less difficult to breed the young of the Colibri than those of the fly-bird; they are as delicate, and confinement proves equally fatal to them. The parents have been seen, hurried on by the audacity of affection, to rush with food for their progeny into the very hands of the plunderer. Labat relates an instance of this, which deserves to be quoted. "I showed," says he, "to Father Montdidier a nest of Colibris, which was placed on a shed near the house. He carried it off with the young, when they were about fifteen or twenty days old, and put them in a cage at his room window, where the cock and hen continued to

* Journal de Physique, Janvier 1778.

feed them, and grew so tame that they scarcely ever left the room; and though not shut in the cage, nor subjected to any restraint, they used to eat and sleep with their brood. I have often seen all the four sitting upon Father Montdidier's finger, singing, as if they had been perched upon a branch. He fed them with a very fine and almost limpid paste, made with biscuit, Spanish wine, and sugar. They dipt their tongue in it, and when their appetite was satisfied they fluttered and chanted. . . . I never saw any thing more lovely than those four pretty little birds, which flew about the house, and attended the call of their foster-father*."

Marcgrave, who does not discriminate the Colibris from the fly-birds, mentions them as having only a feeble cry, and no travellers ascribe song to them. Thevet and Lery alone assert of their *gonambouch* that it chants so as to rival the nightingale†; for it is from them

* " He preserved them in this way five or six months, and we hoped soon to see them breed, when Father Montdidier, having one night forgotten to tie the cage in which they roosted by a cord that hung from the ceiling, to keep them from the rats, had the vexation in the morning to find that they were disappeared: they had been devoured."—Labat, *Nouveau Voyage aux Iles de l'Amerique*. Paris, 1722, t. iv. p. 14.

† " But, as a singular curiosity, and as a masterpiece of littleness, we must not omit a bird which the savages call *gonambouch*, of a whitish and shining plumage, which, though not larger than a hornet, excels in song; insomuch, that this diminutive creature, scarcely stirring from the great millet,

that Coreal and some others have repeated the same. But it is most likely a mistake; the gonambouch, or little bird of Lery, which has a *whitish shining plumage, and a clear distinct voice*, is the *sugar-bird*, or some other, and not the Colibri, whose notes form, according to Labat, only a sort of pleasant hum.

It does not appear that the Colibris advance so far into North America as the fly-birds; at least Catesby says that he saw only one species of these in Carolina. And Charlevoix, who pretends that he found a fly-bird in Canada, confesses that he never saw there a Colibri*. Yet it is not the cold that prevents it from visiting that province in the summer, since it seeks a cool temperature at a considerable height among the Andes. M. de la Condamine never saw Colibris more numerous than in the gardens of Quito †, where the climate is not hot. They prefer, therefore, a warmth of twenty or twenty-one degrees ‡; where, in a perpetual round of pleasures and joys, they fly from

which the Americans name *avati*, or other great plants, has its bill and throat always open. If one did not repeatedly see and hear, he would hardly be persuaded that from so slender a body could proceed notes so clear, so liquid, and so loud, as not to yield to those of the nightingale."—*Voyage au Bresil, par Jean de Lery*. Paris, 1578, p. 175. The same fact is mentioned by Thevet.—*Singularités de la France Antartique*. Paris, 1558. p. 94.

* Hist. de Saint Domingue. Paris, 1730, t. i. p. 32.

† Voy. de la Candamine. Paris, 1745, p. 171.

‡ i. e. 77° or 79° of Fahrenheit.

the expanded blossom to the opening bud, and where the harmonious year for ever invites them, by its enchanting mildness, to love and fruition *.

* 'There are no humming-birds in Africa, or in any part of the old continent. Sonnini asserts, that what travellers have taken for these birds in the hot climates of our hemisphere are woodpeckers, or creepers. W.

THE TOPAZ COLIBRI

First Species.

As smallness was the most striking character of the fly-birds, we began with the smallest : but that property not being so conspicuous in the Colibris, we shall resume the natural order of magnitude. The Topaz appears, exclusive of the two long shafts that extend from its tail, to be the largest of the genus ; we should also call it the most beautiful, did not all these brilliant birds rival each other, and bewilder the ima-

* CHARACTER SPECIFICUS.

TROCHILUS PELLA. T. curvirostris ruber, rectricibus intermediis longissimis, corpore rubro, capite fusco, gula aurata uropygioque viridi.—*Lath. Ind. Orn.* i. p. 302. No. 2.

TROCHILUS PELLA.—*Gmel. Syst.* i. p. 485.

POLYTMUS SURINAMENSIS LONGICAUDUS RUBER.—*Bris.* iii. p. 690. 15.

LE COLIBRI TOPAZE.—*Buff. Pl. Enl.* 599. 1.—*Buff. par Sonn.* liii. p. 258.

LONG-TAILED RED HUMMING-BIRD.—*Edw.* t. 32.

TOPAZ HUMMING-BIRD.—*Lath. Syn.* ii. p. 746. 2.

HABITAT

in Surinamo.—8 pollices longus.

W.

gination amid the blaze of their charms. Its form is delicate, slender, elegant, and rather smaller than the common creeper; its total length, from the point of the bill to the end of the true tail, being nearly six inches—the two long shafts project two inches and a half beyond it; the throat, and the fore side of the neck, decorated by the most brilliant topaz mark; that colour viewed obliquely changes into gold-green, and from below it appears pure green; a hood of soft black covers the head, a thread of the same black incloses the topaz mark; the breast, the neck, the top of the back, are of a finer deep purple; the belly is of a still richer purple, and dazzling with red and gold reflections; the shoulders and the lower part of the back are orange-rufous; the great quills of the wing, violet-brown; the little quills, rufous; the colour of the superior and inferior coverts of the tail, gold-green; the lateral quills rufous, the two middle ones purple-brown; these project into two long shafts, which are webbed with a small edging a line broad on each side; these long shafts, in their natural position, cross each other a little beyond the tail, and then diverge; they drop in moulting, and the male to which they belong would then resemble the female, were he not discriminated by other characters. The female has not the topaz breast, but only a slight trace of red; and in place of the fine purple and flame-rufous of the male's plumage, almost all

that of the female is gold-green: in both, the feet are white*.

* According to Sonmini, these birds are found on the banks of rivers in French Guiana, but more frequently in the interior of the country, where, during the summer, he often saw them in considerable numbers. They perch on the low branches of the trees which hang over the river, and, in flying, raise the surface of the water like swallows. W.

THE GARNET*.

Second Species.

THE cheeks as far as under the eye, the sides and lower part of the neck and throat to the breast, are of a fine brilliant garnet; the upper side of the head and back, and the under side of the body, are of a soft black; the tail and wings of the same colour, but ornamented with gold-green. The bird is five inches long, and the bill ten or twelve lines.

* TROCHILUS GRANATINUS, Var. A.—*Lath.*

THE WHITE-SHAFT.

Third Species.

Of all the colibris, this has the longest bill, which is twenty lines: the feathers of the tail, next the two long shafts, are also the longest, and the lateral ones continually decrease, to the two outermost, which are the shortest, and this gives the tail a pyramidal shape; its quills have a gold gloss on a grey and blackish ground, with a whitish edge at the point, and the two shafts are white through the whole projecting portions; all the upper side of the

* CHARACTER SPECIFICUS.

TROCHILUS SUPERCILIOSUS. *T. curvirostris fuscus nitens, rectricibus intermediis longis, abdomine subincarnato, superciliis albis.*—*Lath. Ind. Orn.* i. p. 302. No. 3.

TROCHILUS SUPERCILIOSUS.—*Gmel. Syst.* i. p. 485.

POLYTOMUS CAYANENSIS LONGICAUDUS.—*Bris.* iii. p. 686. 13. t. 35. f. 5.

LE COLIBRI à LONGUE QUEUE de CAYENNE.—*Pl. Enl.* 600. f. 3.

LE BRIN BLANC.—*Buff. par Sonn.* liii. p. 264.

SUPERCILIOUS HUMMING-BIRD.—*Lath. Syn.* ii. p. 747.3.

HABITAT

in Cayana.—Vix pollices 6 longus,

W.

back and head, gold-colour; the wing violet-brown; and the under side of the body white-grey *.

* The female differs from the male in having a shorter beak, and wanting the two long shafts. The young male has a russet breast and a white tail, except the two middle feathers. W.

The ZITZIL, or DOTTED COLIBRI

Fourth Species.

ZITZIL is contracted for *Hoitzitzil*, which is the Mexican name of this bird. It is pretty large; its wings blackish, marked with white points on the shoulders and back; the tail is brown, and white at the tip. This is all we can gather from an ill-written description of Hernandez's editor †. He subjoins that he got his information from one Father Aloaysa; and

* CHARACTER SPECIFICUS.

TROCHILUS PUNCTULATUS. T. curvir. viridi-aureus, tectricibus alarum colloque inferiore albg maculatis, rectricibus fusco-virescentibus apice albis.—*Lath. Ind. Orn.* i. p. 306. No. 15.

TROCHILUS PUNCTULATUS.—*Gmel. Syst.* i. p. 488.

POLYTMUS PUNCTULATUS.—*Bris.* iii. p. 669. 2.

LE ZITZIL, ou COLIBRI PICQUETÉ.—*Buff. par Sonn.* liii. p. 266.

HOIZIT-ZILTOTOTL.—*Fernand. Mex.* p. 705.

SPOTTED HUMMING-BIRD.—*Lath. Syn.* ii. p. 755. 13.

HABITAT

in Mexico.— $5\frac{1}{2}$ pollices longus.

W.

† Jo. Fab. Linceus.

that the Peruvians call the same bird *pilleo*, and, that living upon the juice of flowers, it prefers that of the thorny tribes*.

* In another part of his work,^b Hernandez gives the names of several species of Fly-birds and Colibris, without characterising any; these names are, *Quetzal Hoitzitzillin*, *Zochio Hoitzitzillin*, *Xinlks Hoitzitzillin*, *Tozcacoz Hoitzitzillin*, *Yotac Hoitzitzillin*, *Tenoc Hoitzitzillin*; whence it appears that *Hoitzitzillin* is the generic name.

THE BLUE-SHAFT*.

Fifth Species.

ACCORDING to Seba, whom Klein and Brisson have followed in reckoning this a species of colibri, the two long projections of feathers which decorate its tail are of a fine blue; the same colour, only deeper, covers the stomach and fore-part of the head; the upper side of the body and of the wings is light-green; the belly cinereous. It is one of the largest colibris, and almost equal to the epicurean warbler. Seba's figure represents it as a creeper, and that author seems to have never observed

* CHARACTER SPECIFICUS.

TROCHILUS CYANURUS. *T. curvir. viridis, subtus cinereo-griseus, capite anteriore collo inferiore rectricibusque duabus intermediis longissimis caruleis.*—*Lath. Ind. Orn. i.* p. 303. No. 5.

TROCHILUS CYANURUS.—*Gmel. Syst. i.* p. 485.

POLYTMUS MEXICANUS LONGICAUDUS.—*Bris. iii.* p. 686. 14.

LE BRIN BLEU.—*Buff. par Sonn. liii.* p. 168.

BLUE-TAILED HUMMING-BIRD.—*Lath. Syn. ii.* p. 749. 5.

HABITAT

in Mexico.— $8\frac{1}{2}$ pollices longus.

W.

the three shades in the form of the bill which discriminate these three tribes, the fly-birds, the colibris, and the creepers. Nor is he more fortunate in displaying his erudition; he applies to this colibri the Mexican name *yayauh-quitototl*, which, in Fernandez, denotes a bird of the size of a stare. But such errors are trifling in comparison of those into which naturalists are led by the collectors of curiosities, who value nothing but the glitter of their cabinets. To find an instance, we need not step aside: Seba mentions colibris from the Moluccas, from Macassar, and from Bali, not knowing that this tribe of birds is peculiar to the new world. Brisson copies the mistake, and describes three species of *colibris* from the *East Indies*. These are undoubtedly creepers, the brilliancy of whose colours, and the names *tsioei* and *kakopit*, which Seba translates *little kings of flowers*, have suggested the colibri. No traveller acquainted with natural history has found colibris in the old continent; and what Francis Cauche says of the subject is too obscure to merit attention*.

* In his account of Madagascar, *Paris*, 1651, p. 137, borrowing the name and the habits of the colibri, he ascribes them to a little bird of this island. It is probably by a similar abuse of names, that *fly-bird* occurs in the voyages of the company, applied to a bird of the Coromandel coast, which is indeed very small, and is elsewhere called *tati*.—*Recueil de Voyages qui ont servi à l'établissement de la Compagnie des Indes*. Amsterdam, 1702, t. vi. p. 513.

The GREEN-and-BLACK COLIBRI*.

Sixth Species.

It is rather more than four inches long; its bill, thirteen lines; its head, neck, and back, are gold-colour and bronze; the breast, the belly, the sides of the body, and the legs, are shining black, with a light-reddish reflection; a little white bar crosses the lower belly, and another of gold-green, glistening with lively blue, intersects transversely the top of the breast; the tail is velvet-black, with the blue gloss of polished steel. It is said that the female may be distinguished in this species by the want of

* CHARACTER SPECIFICUS.

TROCHILUS HOLOSERICEUS. *T. curvir. viridis, rectricibus æqualibus supra nigris, fascia pectorali cærulea, abdomine nigro.*—*Lath. Ind. Orn. i. p. 305. No. 14.*

TROCHILUS HOLOSERICEUS.—*Gmel. Syst. i. p. 491.*

POLYTMUS MEXICANUS.—*Bris. iii. p. 676. 7. t. 35. f. 2.*

LE COLIBRI VERT ET NOIR.—*Buff. par Sonn. liii. p. 271.*

BLACK-BELLIED HUMMING-BIRD.—*Edw. t. 36.—Bancr. Guian. p. 169.—Lath. Syn. ii. p. 754. 12.*

HABITAT

in Mexico, Guiana.— $4\frac{1}{2}$ pollices longus.

W.

the white spot on the lower belly. The bird is found both in Mexico and in Guiana. Brisson refers to this species the *avis auricoma Mexicana* of Seba, which is indeed a colibri; but his description is so vague and indefinite, as to apply equally to them all.

THE TUFTED COLIBRI.

Seventh Species.

BRISSEAU finds this also in Seba's catalogue. I am generally averse to form species on the indications, so often defective, of that compiler; but the characters of the present seem sufficiently distinct to be adopted. "This little bird," says Seba, "has a fine red plumage, blue wings; two long feathers project from the tail; and on its head there is a tuft which is very long in proportion to its thickness, and falls back on the neck; the bill is long and curved, including a small *bifid* tongue, which serves to suck the flowers."

Brisseau measuring Seba's figure, which is not of much account, found nearly five inches six lines to the end of the tail.

* CHARACTER SPECIFICUS.

TROCHILUS PARADISEUS. *T. curvirostris ruber, alis cæruleis, capite cristato, rectricibus intermediis longissimis.*—*Lath. Ind. Orn. i. p. 301. No. 1.*

TROCHILUS PARADISEUS.—*Gmel. Syst. i. p. 484.*

POLYTOMUS MEXICANUS LONGICAUDUS RUBER CRISTATUS.—*Bris. iii. p. 692. 16.*

LE COLIBRI HUPPE.—*Buff. par Sonn. liii. p. 273.*

PARADISE HUMMING-BIRD.—*Lath. Syn. ii. p. 745. 1.*

HABITAT

in Mexico.— $8\frac{1}{2}$ pollices longus.

W.

THE VIOLET-TAILED COLIBRI *.

Eighth Species.

THE bright pure violet which paints the tail of this colibri discriminates it from the rest: the four middle feathers of the tail are of a violet colour, melted under brilliant reflections of gold-green; the six outer ones, viewed from below, present a white point, with a violet spot that surrounds a space of dark-blue like burnished steel; all the under side of the body is richly gilded in the front-view, and when held obliquely it appears green; the wing, as in all these birds, is brown, verging on violet; the

* CHARACTER SPECIFICUS.

TROCHILUS NITIDUS. T. curvir. viridi-auratus, subtus albus, gula media fusco-viridi, cauda violacea, rectricibus tribus exterioribus apice albis.—*Lath. Ind. Orn.* i. p. 305. No. 13.

TROCHILUS ALBUS.—*Gmel. Syst.* i. p. 488.

LE COLIBRI à QUEUE VIOLETTE.—*Buff. Pl. Enl.* 671. f. 2.
—*Buff. par Sonn.* liii. p. 275.

VIOLET-TAILED HUMMING-BIRD. — *Lath. Syn.* ii. p. 754. 11.

HABITAT

in Cayana.—6 pollices longus.

W.

sides of the throat are white, and in the middle there is a longitudinal streak of brown mixed with green; the sides are coloured with the same; the breast and belly are white. This species is pretty large, it being five inches; and it has one of the longest bills, which is sixteen lines.

THE GREEN-THROATED COLIBRI *.

Ninth Species.

A STREAK of very bright emerald-green is traced on the throat of this colibri, which falls, spreading on the fore side of the neck; there is a black spot on the breast; the sides of the throat and neck are rufous, mixed with white; the belly is pure white; the upper side of the body, and of the tail, dull gold-green; below the tail, are the same violet, white and burnished steel spots, as in the *violet-tailed co-*

* CHARACTER SPECIFICUS.

TROCHILUS GLARIS. T. curvir. viridi-aureus, collo subtus smaragdino lateribus rufo, abdomine albo, pectoris macula nigra.—*Lath. Ind. Orn.* i. p. 306. No. 16. *

TROCHILUS MACULATUS.—*Gmel. Syst.* i. p. 488.

LE COLIBRI à GORGE VERTE DE CAYENNE.—*Pl. Enl.* 671. f. 1.

—— à CRAVATE VERTE. — *Buff. par Sonn.* liii. p. 277.

GREEN-THROATED HUMMING-BIRD.—*Lath. Syn.* ii. p. 755.

HABITAT

in Mexico.

W.

libri. These two species appear analogous, and they are of the same size, but the bill of the Green-throated Colibri is not so long. We saw in Mauduit's cabinet a colibri of the same dimensions, with the upper side of the body faintly tinged with green-and-gold on a blackish-grey ground, and all the fore-part of the body rufous, which seems to us the female.

THE CARMINE-THROATED COLIBRI*.

Tenth Species.

It is four inches and a half in length; its bill thirteen lines, much curved, and therefore analogous to that of the creepers, as Edwards remarks: the throat, the cheeks, and all the fore-part of the neck, carmine red, with a ruby-lustre; the upper side of the head, body, and tail, of a soft blackish-brown, with a slight fringe of blue on the edge of the feathers; a deep gold-green shines on the wings; the inferior and superior coverts of the tail are of a fine blue. This bird was brought from Surinam into England.

* CHARACTER SPECIFICUS.

TROCHILUS JUGULARIS. T. curvir. cærulescens, rectricibus æqualibus, genis colloque subtus sanguineis. — *Lath. Ind. Orn.* i. p. 305. No. 12.

TROCHILUS JUGULARIS.—*Gmel. Syst.* i. p. 489.

LE COLIBRI à GORGE CARMIN.—*Buff. par Sonn.* liii. p. 279.

RED-BREASTED HUMMING-BIRD.—*Edw. t.* 266. f. 1.—*Lath. Syn.* ii. p. 753. 10.

HABITAT

in Surinamo.— $4\frac{1}{2}$ pollices longus.

W.

THE VIOLET COLIBRI *

Eleventh Species.

It is four inches and two lines in length; its bill eleven lines; the whole head, neck, and belly, covered with purple-violet, which is brilliant on the throat and on the fore-side of the neck, and diluted on all the rest of the body with a mixture of velvet-black; the wing is gold-green; the tail the same, with a changing reflection of black. It is found in Cayenne; its colours resemble those of the *garnet* colibri; but the difference of size is too great to admit of their being classed together.

* CHARACTER SPECIFICUS.

TROCHILUS VIOLACEUS. T. curvir. atro-violaceus, gutture pectoreque violaceo-nitentibus, alis caudaque viridi-aureis, rectricibus atro contaminatis.—*Lath. Ind. Orn.* i. p. 306. No. 17.

TROCHILUS VIOLACEUS.—*Gmel. Syst.* i. p. 438.

POLYTMUS CAYANENSIS VIOLACEUS.—*Bris.* iii. p. 683. 11. t. 35. f. 3.

LE COLIBRI VIOLET.—*Buff. par Sonn.* liii. p. 281.—*Pl. Enl.* 600. f. 2.

VIOLET HUMMING-BIRD.—*Lath. Syn.* ii. p. 756. 15.

●
HABITAT

in Cayana.—4½ poll. longus.

W.

THE GREEN GORGET*.

Twelfth Species.

It is rather larger than the violet-tailed colibri, but its bill is not so long; all the forepart and sides of the neck, with the lower part of the throat, emerald-green; the top of the throat, or the small portion beneath the bill, of a bronze colour; the breast velvet-black; tinged with dull-blue; green and gold appear on the flanks, and cover all the upper side of the body; the belly white; the tail purple-blue, with the reflection of burnished steel, and exceeds not the wing. We conceive the female to be another colibri of the same size and distribution of colours, except that the green, on

* CHARACTER SPECIFICUS.

TROCHILUS PECTORALIS. T. curvir. viridis nitens, collo inferiore viridi, pectore nigro, abdomine albo, cauda chalybeo purpurascente.—*Lath. Ind. Orn.* i. p. 306. No. 18.

TROCHILUS GRAMINEUS.—*Gmel. Syst.* i. p. 488.

LE HAUSSE-COL VERT.—*Buff. par Sonn.* liii. p. 183.

BLACK-BREASTED HUMMING-BIRD.—*Lath. Syn.* ii. p. 756.
16.

HABITAT

cum congeneribus.—6 pollices longus.

W.

the fore-part of the neck, is intersected by two white streaks, and that the black, on the throat, is neither so broad nor so deep. These two birds are in the admirable series of colibris and fly-birds in Dr. Mauduit's cabinet *.

* We learn, from Vieillot, that the Green Gorget continues near the houses in St. Domingo as long as the trees are in flower; and that it prefers perching on a dry separate branch, where it often expands its tail in a semicircular shape. Vieillot says he never heard it sing, but that it makes a continual noise, when in season. It drives other birds from the tree where it nestles. It lays two eggs. W.

THE RED-COLLAR*.

Thirteenth Species.

THIS is of the middle size, being four inches and five or six lines in length; on the lower and fore-part of the neck, there is a handsome red half-collar, of considerable breadth; the back, the neck, the head, the throat, and the breast, are of a bronze and gold-green; the two middle feathers of the tail are of the same colour; the eight others are white, and this is the character by which Edwards discriminates the bird.

* CHARACTER SPECIFICUS.

PROCHILUS LEUCURUS. T. curvir. viridi-aureus, rectricibus æqualibus albis, collari rubro.—*Lath. Ind. Orn.* i. p. 307. No. 19.

TROCHILUS LEUCURUS.—*Gmel. Syst.* i. p. 487.

POLYTMUS SURINAMENSIS.—*Bris.* iii. p. 674. 5.

LE COLLIER ROUGE.—*Buff. Pl. Enl.* 600. f. 4. — *Buff. par Sonn.* liii. p. 285.

WHITE-TAILED HUMMING-BIRD.—*Edw.* t. 256.—*Lath. Syn.* ii. p. 757. 17.

HABITAT

in Surinamo.—4½ pollices longus.

W.

THE BLACK PLASTRON*.

Fourteenth Species.

THE throat, the fore-side of the neck, the breast, and the belly, of this colibri, are of the most beautiful velvet-black; a streak of brilliant blue rises from the corners of the bill, and descending over the sides of the neck, separates the black plastron, or breast-piece, from the rich gold-green with which all the under surface of the body is covered; the tail is of a

* CHARACTER SPECIFICUS.

TROCHILUS MANGO. T. curvir. viridis nitens, subtus ater, rectricibus subæqualibus ferrugineis.—*Lath. Ind. Orn.* i. p. 307. No. 20.

TROCHILUS MANGO.—*Gmel. Syst.* i. p. 491.

GUAINUMBI MINOR, ROSTRO NIGRO.—*Raii Syn.* p. 83. 5.
—*Will.* p. 167. 5.

POLYTMUS JAMAICENSIS.—*Briss.* iii. p. 679. 8. t. 35. f. 1.

LE COLIBRI du MEXIQUE.—*Pl. Enl.* 680. f. 2.—de la JAMAIQUE.—*Id.* f. 3.

LE PLASTRON NOIR.—*Buff. par Sonn.* liii. p. 286.

MANGO HUMMING-BIRD.—*Alb.* iii. t. 49. b.—*Lath. Syn.* ii. p. 758. 18.

HABITAT

in Mexico, Brasilia, insula Dominicensi.—4 pollices et ultra longus.
W.

purple-brown, glossed with shining violet, and each quill is edged with the blue of burnished steel. These colours resemble those of Marcgrave's fifth species, only the bird is rather smaller: it is four inches long; the bill one inch; the tail eighteen lines. It is found equally in Brazil, in St. Domingo, and in Jamaica.

THE WHITE PLASTRON*.

Fifteenth Species.

ALL the under side of the body, from the throat to the lower belly, is white pearl-grey; the upper side of the body is gold-green; the tail is white at the tip, then crossed by a bar of black burnished steel, and after that by one of purple-brown; and it is black, with a blue steel cast at its origin. It is four inches long, and its bill an inch.

* CHARACTER SPECIFICUS.

TROCHILUS MARGARITACEUS. T. curvir. viridis nitens, subtus margaritaceo-caeus, cauda basi chalybea, medio purpureo-fusca, ad apicem fascia fusca apice alba.—*Lath. Ind. Orn.* i. p. 308. No. 24.

TROCHILUS MARGARITACEUS.—*Gmel. Syst.* i. p. 490.

LE COLIBRI de ST. DOMINGUE.—*Pl. Enl.* 680. f. 1.

LE PLASTRON BLANC.—*Buff. par Sonn.* liii. p. 291.

GREY-NECKED HUMMING-BIRD.—*Lath. Syn.* ii. p. 761.

HABITAT

in insula Dominicensi.—4 pollices longus.

W.

THE BLUE COLIBRI*.

Sixteenth Species.

It is strange that Brisson, who never saw this bird, should follow the vague, inaccurate account of Seba, instead of the description of Dutertre. The wings and tail are not blue, as Brisson represents, but black, as Father Dutertre mentions, and indeed according to the analogy of all the birds of this tribe. The whole of the back is azure; the head, the throat, and the fore-part of the body, as far as the middle of the belly, are velvet crimson, which, if held in different positions, is enriched with a thousand beautiful reflections. Dutertre only adds, that it is about *half the size of the little crowned wren*. The figure of Seba, which Brisson seems to take, represents a creeper.

* CHARACTER SPECIFICUS.

TROCHILUS CYANEUS. T. curvir. coccineo sericeus, dorso cæruleo, alis nigris.—*Lath. Ind. Orn.* i. p. 309. No. 25.

TROCHILUS VENUSTISSIMUS.—*Gmel. Syst.* i. p. 490.

POLYTMUS MEXICANUS CYANEUS.—*Briss.* iii. p. 681. 3.

LE COLIBRI BLEU.—*Buff. par Sonn.* liii. p. 293.

CRIMSON-HEADED BLUE HUMMING-BIRD.—*Lath. Syn.* ii. p. 762. 23.

HABITAT

in Mexico.

W.

THE PEARL-GREEN *.

Seventeenth Species.

THIS is one of the smallest of the tribe, and hardly exceeds the crested fly-bird; all the upper side of the head, body, and tail, are of a faint gold-green, which is intermixed, on the sides of the neck, and more and more on the throat, with pearl white-grey; the wing is brown, as in the rest, and tinged with violet; the tail is white at the end, and of the colour of polished steel below.

* CHARACTER SPECIFICUS.

TROCHÆLUS DOMINICUS. T. curvir. viridis nitens, subtus subcinereus, rectricibus medio ferrugineis, apice albis.—*Lath. Ind. Orn.* i. p. 309. No. 26.

TROCHILUS DOMINICUS.—*Gmel. Syst.* i. p. 489.

POLYTMUS DOMINICENSIS.—*Bris.* iii. p. 672. 4. t. 35. f. 4.

LE VERT PERLE'.—*Buff. par Sonn.* liii. p. 295.

ST. DOMINGO HUMMING-BIRD.—*Lath. Syn.* ii. p. 762. 24.

HABITAT

in insula Dominicensi.—4 et ultra pollices longus.

W°

THE RUSTY-BELLIED COLIBRI

Eighteenth Species.

THIS is the fourth species of Marcgrave, and must be very small, since he says that it is inferior to the third, which he had formerly stated as the least. All the upper side of the body is gold-green; all the under side rusty-blue; the tail is black, with green reflections, and the point is white; the lower mandible is yellow at its origin, and black to the extremity; the feet are yellowish-white.

* CHARACTER SPECIFICUS.

TROCHILUS BRASILIENSIS. T. viridi-aureus, subtus albo rufescens, cauda nigricante-viridi apice albo, tibiis pennatis. — *Lath. Ind. Orn.* i. p. 308. No. 23.

TROCHILUS HIRSUTUS. — *Gmel. Syst.* i. p. 490.

POLYTMUS BRASILIENSIS. — *Bris.* iii. p. 670. 3.

GUAINUMBI MINOR ROSTRO INCURVO. — *Raii Syn.* p. 83.

4. — *Will.* p. 166. 4. — *Id. (Angl.)* p. 234. 4.

LE COLIBRI à VENTRE ROUSSATRE. — *Buff. par Sonn.* liii. p. 296.

RUFIOUS-BELLIED HUMMING-BIRD. — *Lath. Syn.* ii. p. 760.
° 21.

HABITAT

in Brasilia.

W.

THE LITTLE COLIBRI*.

Nineteenth Species.

THIS is the last and smallest of all the Colibris; it is only two inches and six lines in length; its bill eleven lines, and its tail twelve or thirteen; it is entirely gold-green, except the wing, which is violet or brown: there is a small white spot on the lower belly, and a small border of the same colour on the feathers of the tail, broader on the two outer ones, which it

* CHARACTER SPECIFICUS.

TROCHILUS THAUMANTIAS. T. curvir. viridis nitens, rectricibus æqualibus albo fimbriatis, extima exterius alba.—*Lath. Ind. Orn.* i p. 309. No. 27.

TROCHILUS THAUMANTIAS.—*Gmel. Syst.* i. p. 489.

GUAINUMBI MINOR TOTO CORPORE AUREO.—*Raii Syn.* p. 83 6.—*Will.* p. 167.

POLYTMUS.—*Bris.* iii. p. 667. 1.

LE PETIT COLIBRI.—*Buff. Pl. Enl.* 600. f. 1.—*Buff. par Sonn.* liii. p. 300.

ADMIRABLE HUMMING-BIRD.—*Lath. Syn* ii. p. 768. 25.

HABITAT

in Brasilia.—2½ pollices longus.

W.

half covers. Marcgrave again stops to admire the brilliant plumage with which nature has decked these charming birds. The Little Colibri in particular, he observes, dazzles like the sun*.

* *In summâ splendet ut sol.*

THE PARROT*†.

THE animals which man has the most admired, are those that seem to participate of his nature. He is struck with wonder as often as he traces his external form in the ape, or hears his voice imitated by the Parrot; and, in the first moments of his surprise, he is disposed to rank them above the rest of the brutes. These animals have fixed even the stupid attention of savages, who behold the magnificent scene of nature and her exquisite productions

* PSITTACUS.

CHARACTER GENERICUS.

Rostrum aduncum, mandibula superiore mobili, plerisque
cera instructa.

Nares in rostri basi.

Lingua carnosae, obtusa, integra.

Pedes scansorii.

† In Greek, *ψιττακη*; in modern Greek, *παπαγας*; in Latin, *Psittacus*. In German the Parrot is called *Pappengey*, the Parakeet *Sittick*, or *Sickust*: in Spanish the Parrot is named *Popagio*: in Italian, *Papagallo*, and the Parakeet *Pe-roquette*: in Polish, *Papuga*: in Turkish, *Dudi*: in Mexican, *Taznene*: in Brazilian, *Ajuru*, and the Parakeet *Tui*. In old French, *Papegaut*. According to Aldrovandus, most of these names are derived from *Papa*, and denote the pope of the birds.

with the most perfect insensibility : they stop the progress of their canoes, and linger gazing whole hours at the capers of the marmoset. Parrots are the only birds which they are fond of raising and educating, and which they are even at pains to improve ; for they have discovered the art, which is still unknown to us, of varying and heightening the colours that deck the plumage*.

The power of using the hand, and of walking on two feet, the resemblance, how faint soever, to the face, the want of a tail, the naked hams ; the similarity of the sexual parts, the position of the breasts, and the menstrual flux in the females ; the ardent passion of the males for women : all these circumstances have procured to the ape the name of *wild man* from those who themselves are indeed only half-men, and who can compare only the exterior characters. Had what was equally possible taken place, had the voice of the Parrot been bestowed on the ape, the human race would have been struck dumb with astonishment, and the philosopher could hardly have been able to demon-

* Those Parrots to which the savages give artificial colours are termed *tapirés*. This is effected, it is said, by means of the blood of a frog, which they drop into the small wounds made in young Parrots by plucking their feathers ; those which sprout again change their green or yellow tints into orange, rose colour, or variegated hues, according to the medicaments employed.

strate that the ape was still a brute. It is fortunate, therefore, that nature has separated the faculties of imitating our speech and our gestures, and shared them between two very different species ; and while she has conferred on all animals the same senses, and on some the same members and organs, with man, she has reserved for him alone the power of improving them ; that noble mark of our pre-eminence, which constitutes our empire over the animated world.

There are two kinds of improvement ; the one barren, and confined to the individual ; the other prolific, and extending through the species, and cultivated in proportion as it is encouraged by the institutions of the society. Among brutes, the experience of one race is never transmitted to the succeeding ; their acquisitions are merely individual ; they are the same now that they ever were—ever will be. But man is progressive ; he receives the instructions of past ages, he reaps the benefit of the discoveries of others, and, by a proper use of his time, he may continually advance in knowledge. And who can, without regret and indignation, view that long gloomy night of ignorance and barbarism which overspread Europe, and which not only arrested our improvement, but thrust us back from that elevation which we had attained ? But for these unfortunate vicissitudes the human species would in-

variably approach towards the point of perfection.

The mere savage, who shuns all society, and receives only an individual education, cannot improve his species, and will not differ, even in understanding, from those animals on which he has bestowed his name. Nor will he acquire even speech, if the family be dispersed, and the children abandoned soon after birth. The first rudiments of the social disposition are therefore unfolded by the tender attachment and the watchful solicitude of the mother; the helpless state of the infant requires constant and assiduous attention; its claimant cries are answered by soothing expressions, which begins the formation of language, and, during the space of two or three years, this grows in some degree fixed and regular. But, in other animals, the growth is much more rapid; the parental endearments last only six weeks or two months; and the impressions are slight and transitory; and, after separation, they entirely cease. It is not, therefore, to the peculiar structure of our organs that we are indebted for the attainment of speech; the Parrots can articulate the same sounds, but their language is mere prattle, and void of signification.

The power of imitating our discourse or our actions confers no real superiority on an animal. It never incites to the cultivation of talents—it never tends to the improvement of the species. The articulation of the Parrot im-

plies only the close analogy of its organs of hearing and of voice to those in man ; and that similarity of structure obtains, though in a less degree, in many other birds, whose tongue is thick, round, and nearly of the same form. The stares, the blackbirds, the jays, the jackdaws, &c. can imitate words. Those whose tongue is forked (and almost all the small birds may be ranged in that class) whistle more easily than they prattle ; and if, with this structure, they have also sensibility of ear, and can accurately retain the impressions made on that organ, they will learn to repeat airs : the canary, the linnet, the siskin, and the bulfinch, seem natural musicians. The Parrot imitates every sort of noise—the mewling of cats, the barking of dogs, and the notes of other birds, as well as the human voice ; yet it can only scream or pronounce very short phrases : and, though capable of even articulating sounds, it is unable to modulate these, or support them by intermingling gentle cadences. It has therefore less acuteness of perception, less memory, and less flexibility of organs.

There are also two different kinds of imitation ; the one is acquired from reflection, the other is innate and mechanical : the latter proceeds from the common instinct diffused through a whole species, which prompts or constrains each individual to perform similar actions ; and the more stupid the animal, the more entire will be this influence, and the

closer will be the resemblance. A sheep has invariably the same habits with every other sheep; the first cell of a bee is precisely like the last. The knowledge of the individual is equal to that of the species;—such is the distinction between reason and instinct. The other kind of imitation, which should be regarded as artificial, is the acquisition of the individual, and cannot be communicated. The most accomplished Parrot will never transmit his talent of prattling to his offspring. When an animal is instructed by man, the improvement rests with it alone. This imitation depends, as well as the former, on the peculiar structure; but it also implies sensibility, attention, and memory; and those species which are susceptible of education, rank high in the order of organised beings. If the animal be easily trained, and each individual receive a certain degree of instruction, as in the case of the dogs, the whole species will acquire superiority under the direction of man; but when abandoned to nature, the dog will relapse into the wolf or the fox, and would never of itself emerge from that state.

All animals may therefore be improved by associating with man: but they cannot be instructed to improve each other; for they never can communicate the ideas and knowledge which they have acquired. Even birds whose shape and proportions are so different from those of quadrupeds are susceptible of the same

degrees of education. The *agamis* can be trained to perform nearly all the actions of the dogs; a canary, properly bred, shows its attachment by caresses that are equally animated, and more innocent and more sincere than those of the cat. There are many instances of the wonderful effects of education on the rapacious birds*,

* "In 1763," says M. Fontaine, "a buzzard was brought to me that had been taken in a snare: it was at first extremely savage, and even cruel. I undertook to tame it, and I succeeded by leaving it to fast, and constraining it to come and eat out of my hand. By pursuing this plan, I brought it to be very familiar; and after having shut it up about six weeks, I began to allow it a little liberty, taking the precaution, however, to tie both pinions of its wings. In this condition it walked out into my garden, and returned when I called it to feed. After some time, when I judged that I could trust to its fidelity, I removed the ligatures, and fastened a small bell, an inch and a half in diameter, above its talon, and also attached on the breast a bit of copper having my name engraved. I then gave it entire liberty, which it soon abused; for it took wing, and flew as far as the forest of Belesme. I gave it up for lost; but four hours after I saw it rush into my hall, which was open, pursued by five other buzzards, which had constrained it to seek its asylum. . . . After this adventure it ever preserved its fidelity to me, coming every night to sleep on my window; it grew so familiar with me, as to seem to take singular pleasure in my company. It attended constantly at dinner, sat on a corner of the table, and very often caressed me with its head and bill, emitting a weak sharp cry, which however it sometimes softened. It is true that I alone had this privilege. It one day followed me, when I was on horseback, more than two leagues, sailing above my head. . . . It had an aversion both to dogs and cats, nor was it in the least afraid of them; it had often tough battles with them, and always came off victorious. I had four very strong cats,

which seem the most savage and the most averse to bend to instruction. In Asia, the pigeon is taught to carry letters between places

which I collected into my garden beside my buzzard ; I threw to them a bit of raw flesh, the nimblest cat seized it, the rest pursued ; but the bird darted upon her body, bit her ears with his bill, and squeezed her sides with his talons with such force, that the cat was obliged to relinquish her prize. Often another cat snatched it the instant it dropt, but she suffered the same treatment, till the buzzard got entire possession of the plunder. He was so dexterous in his defense, that when he perceived himself assailed at once by the four cats, he took wing, and uttered a cry of exultation. At last, the cats, chagrined at their repeated disappointment, would no longer contend.

“ This buzzard had a singular antipathy ; he would not suffer a red cap on the head of any peasant, and so alert he was in whipping it off, that they found their head bare without knowing what was become of their cap. He also snatched wigs without doing any injury, and he carried these caps and wigs to the tallest tree in a neighbouring park, which was the ordinary deposit of his booty He would suffer no other bird of prey to enter his domain ; he attacked them very boldly, and put them to flight. He did no mischief in my court-yard, and the poultry, which at first dreaded him, grew insensibly reconciled to him. The chickens and ducklings received not the least harsh usage, and yet he bathed among the latter. But what is singular, he was not gentle to my neighbours’ poultry ; and I was often obliged to publish that I would pay for the damages which he might occasion. However, he was often fired at, and he received fifteen musket-shots, without suffering any fracture : but once, early in the morning, hovering over the skirts of a forest, he dared to attack a fox ; and the keeper seeing him on the shoulders of the fox, fired two shots at him ; the fox was killed and the buzzard had his wing broken ; yet, notwithstanding this fracture, he escaped from the keeper, and was lost seven days.

a hundred leagues distant : and the art of falconry proves that, by directing the instinct of birds, they may be as much improved as the other animals. On the whole, it appears that if man bestowed equal time and attention upon any animal as upon a child, it would acquire a mechanical imitation of the same actions ; the effects only would differ. In the one case, reason extends and diffuses the attainments ; in the other, they continue stationary, and perish with the possessor.

But that education which seems to unfold the faculties, and meliorate the dispositions of quadrupeds or birds, renders them odious to

This man having discovered, from the noise of the bell, that he was my bird, came next morning to inform me ; I sent to make a search near the spot, but the bird could not be found, nor did it return till seven days after. I had been used to call him every evening with a whistle, which he answered not for six days ; but, on the seventh, I heard a feeble cry at a distance, which I judged to be that of my buzzard : I repeated the whistle a second time, and I heard the same cry. I went to the part whence the sound came, and, at last, found my poor buzzard with his wing broken, which had travelled more than half a league on foot to regain his asylum, from which he was then distant about 120 paces. Though he was extremely reduced, he gave me many caresses. It took nearly six weeks till he was recruited, and his wounds healed ; after which he began to fly as before, and follow his old habits for about a year : he then disappeared for ever. I am convinced that he was killed by accident ; and that he would not have forsaken me from choice."

Letter from M. Fontaine, Curé de Saint-Pierre de Belesme, to M. le Comte de Buffon, bearing date 28th January, 1778.

the rest of their species. When a buzzard, for instance, a magpie, or a jay, escapes to the woods, its savage kindred flock around it to gaze at the novelty. Their wonder is soon converted into rage; and they furiously attack and drive off the intruder: nor is it admitted into their society till it relinquishes its artificial habits, and adopts the manners of the tribe.

Birds are destined by nature to enjoy the completest independence, and exult in the most unbounded freedom. Other animals are condemned to crawl on the surface; these soar aloft in the air. No obstacle can oppose their progress; no spot can fix their residence: the sky is their country, and their course is on the wings of the breeze. They foresee the vicissitude of the seasons, and watch their return. They generally appear when the mild influence of spring has clothed the forests with verdure; there they nestle, concealed under the foliage. Heaven and earth seem to conspire to their felicity. But solicitude soon arises: they dread the cruel visits of the same animals on which they before looked down with contempt. The wild cat, the marten, the weasel, seek to devour the objects of their tenderest affection: the adler climbs to gain their eggs, or devour their progeny: and children, that amiable portion of human kind, but who, from want of employment, are ever in mischief, wantonly plunder the sacred deposits of love. Often the mother rushes into danger in defence of her young:

from the one into the other. Birds also, such as the Parrots, which live and propagate only in warm climates, have remained indigenous; some inhabit the tropical regions of the new continent, others those of the old, and occupy in each a zone extending twenty-five degrees on both sides of the equator.

But it will be said that if the elephants and other large quadrupeds, which at present are peculiar to Africa and India, inhabited originally the northern tracts in both continents, might not this have also been the case in regard to the Parrots? And, as the earth gradually cooled, these might continually advance towards the tropics; and neither the lofty mountains, nor the narrow pass of the isthmus of Panama, could prevent their migration*.

This objection, though plausible, is only a new question, which, in whatever way it be resolved, cannot affect our hypothesis, that the north was the primæval residence of animals, and that they afterwards removed to the regions of the south. But those birds whose constitution is adapted to a hot climate could never rise to the frozen summits of mountains; and the cold that prevails in the elevated regions of the air would as effectually stop their flight, as the various obstacles to be surmounted would limit the progress of the elephant.

* Sonnerat observes, that Louisiana appears to be the most northern part of America inhabited by Parrots. W.

Thus what appears at first an objection is really a confirmation of the theory; since not only the quadrupeds, but also the birds, which are natives of the torrid tracts in the old world, have never penetrated or settled in the insulated continent of South America. In the case of the birds, however, this principle has some exceptions; for a few species are found equally in the equatorial parts of both continents. But this is owing to particular circumstances; their vigorous wings and their power of resting on the surface of the water by means of the broad membranes of their feet. The Parrots can neither soar to a vast height, nor fly to a great distance, and their feet are not webbed. Accordingly, none of these have ever migrated from the one continent to the other, unless transported by men across the intervening ocean*. This will be better perceived after viewing the arrangement, and comparing the descriptions of the several species. It was perhaps as difficult to class them as the monkeys; since all the preceding naturalists have confounded them together.

* The Parrots have a laborious short flight, so that they cannot cross an arm of the sea seven or eight leagues broad. Each island of South America has its particular Parrots; those of St. Lucia, of St. Vincent, of Dominica, of Martinico, are different from each other: those of the Caribbee islands do not resemble them, nor are these Caribbee Parrots found near the Orinoco, which is the part of the continent nearest these islands.—*Note communicated by M. de la Borde, King's Physician at Cayenne.*

The Greeks were acquainted at first with only one species of Parrot, or rather of Parakeet; it is what we now call the *Great Ring Parakeet*, and comes from India. They were brought from the island of Taprobane into Greece by Onesicrites, who commanded Alexander's fleet. They were so new and uncommon that Aristotle himself appears not to have seen them, and mentions them only from report*. But the beauty of these birds, and their power of imitating speech, soon made them the objects of luxury among the Romans, and the prevalence of that practice provoked the indignation of the rigid Cato†. They were lodged in cages of silver, of shells, and of ivory; and the price of a Parrot often exceeded that of a slave‡.

No Parrots were known at Rome, but those brought from India§, until the time of Nero; the emissaries of that prince found them in the island of the Nile, between Syene and Meroe, which is exactly in the limit that we assigned of twenty-four or twenty-five degrees latitude||. Pliny tells us that the Latin name

* *Hist. Anim.* lib. viii. 12. "There is an Indian bird called *psittace*, which is said to speak."

† This austere censor exclaimed in the midst of the assembled senate, "O Senators! O unhappy Rome! what forebodings! in what times do we live, to see the women feed dogs on their knees, and the men carry Parrots in their hands!"—*Columella, Dict. Antiq.* lib. iii.

‡ Statius.

§ Pliny, lib. x. 42.—Pausanius.

|| *Id.* lib. vi. 29.

psittacus was derived from the Indian appellation *psittace*, or *sittace**.

The Portuguese, who first doubled the Cape of Good Hope, and explored the shores of Africa, found the country of Guinea, the islands scattered in the Indian ocean, and also the continent, inhabited by various kinds of Parrots, all unknown in Europe. So numerous they were at Calicut†, in Bengal, and on the African coasts, that the Indians and negroes were obliged during harvest to watch their fields of rice and maize, and to repel the destructive havoc of these birds ‡.

This vast multitude of Parrots in all countries which they inhabit§, seems to prove that they breed several times annually, since the product of one hatch is inconsiderable. Nothing could equal the variety of the species which navigators found on every part of the coast of South America. Many islands were called the *Parrot Islands*. They were the only

* Lib. x. 42. They were brought also in the fifteenth century from the countries through which Alexander marched.—*Relation de Cadamosto*. See *Hist. Gén. des Voyages*, t. ii. 305.

† *Recueil des Voyages qui ont servi à l'établissement de la Compagnie des Indes, &c.* Amsterdam, 1702. t. iii. p. 195.

‡ See Mandeslo, at the end of Olearius, t. ii. p. 144.

§ "Among the many remarkable animals, the Parrots of Malabar excite the admiration of navigators, by their prodigious numbers, and by the variety of their species. Dellon avers that often he had the pleasure of seeing two hundred taken in one draw of a net."—*Hist. Gén. des Voy.* t. xi. p. 454.

animals that Columbus met with in the one where he first landed*. They were the early articles of traffic between the Europeans and Americans†. The American and African Parrots were imported in such numbers, that the Parrot of the ancients was forgotten; it was known only by description in the time of Belon‡.

We shall range the Parrots in two great classes; the first comprehending those of the old continent, the second those of the new.

The first will be subdivided into five families—the Cockatoos, the Parrots properly so called, the Lories, the long-tailed Parrakeets, and the short-tailed Parrakeets! Those of the new world will include six other families—the Maccaws, the Amazonians, the Creeks, the Popinjays, the long-tailed Parroquets, and the short-tailed Parroquets.

* Guafahani, one of the Lucayos.

† First Voyage of Columbus in the beginning of the *Hist. Gén. des Voy.* t. xii.

‡ Nat. des Oiseaux, p. 296

PARROTS

OF THE OLD CONTINENT.

THE COCKATOOS*.

THE largest parrots of the old continent are the Cockatoos. They are all natives of the south of Asia, where they seem indigenous. We are uncertain whether they are also found in Africa, but they are undoubtedly not found in America. They are spread through the southern parts of India †, and in all the islands of the Indian ocean, at Ternat ‡, at Banda §, at Ceram ||, in the Philippine islands ¶, and in

* Les Kakatoes.—*Ruff*.

† “The trees of this city (Amadabat, capital of Gyzarat), and those on the road from Agra to Brampour, which is 150 German leagues, breed an inconceivable number of Parrots..... Some are white, or pearl-grey, and capped with a carnation tuft: these are called *kakatous*, because they distinctly articulate that word. These birds are very common through all India, where they nestle in the towns, on the roofs of houses, like the swallows in Europe.”—*Voyage de Mandeslo*, t. ii. p. 144.

‡ *Voyage autour du Monde*, par Gmelli Carreri, *Paris*, 1719, t. v. p. 5.

§ *Recueil des Voyages qui ont servi à l'établissement de la Compagnie des Indes, &c. Amsterdam*, 1702, t. v. p. 26.

|| *Dampier*.

¶ *Gmelli Carreri*.

those of Sunda*. Their name *kakatoes*, ~~cata-~~
~~ta-~~ and *cacatou*, is formed from their cry †. They are easily distinguished from the other parrots, by their white plumage, by the rounder and more hooked shape of their bill, and particularly by a crest of long feathers, which they can raise or depress at pleasure ‡.

It is difficult to teach the Cockatoos to prattle, and some species can never acquire the imitation. But they are more easily bred §; they all grow tame, and in some parts of India they seem domesticated, for they build their nests on the roofs of the houses. And this facility of education seems to result from their superior understanding; they are more attentive and obedient than other parrots, and they strive, though without success, to repeat what they hear. Their defects are compensated by other expressions of feeling, and by affectionate caresses. All their motions have a gentleness and grace which adds new charms to their beauty. Two of these birds, a male and a female, were shown in March 1775 at the fair

* Voyage de Siam, par le P. Tackard.—Paris, 1686. p. 130.

† “ We made several tacks to double the isle of Cacatoua, so called because of the white parrots that reside in it, and which incessantly repeat that name. This isle is very near Sumatra.” —*Ibid.*

‡ The crown of the head, which is covered by the long reclined feathers, is entirely bald.

§ “ At Ternate, these birds are domestic and docile; they speak little, but scream much.” —*Gmelli Carreri.*

of St. Germain at Paris. They discovered great docility, raised their crest, made a salute with their head, touched with their bill or their tongue, answered their keeper's questions with a sign of assent, as they were desired; they marked by repeated motions the number of persons in the room, the colour of their clothes, the hour of the day, &c.; they billed each other without being directed, an evident token of their inclination to couple, and their keeper told us that they had often commerce together even in our climate. Though the Cockatoos, like the other parrots, use their bill in climbing, they have not the same heavy unpleasant gait; they are, on the contrary, very agile, and walk gracefully, tripping with short quick steps.

THE WHITE - CRESTED COCKATOO *.

First Species.

It is nearly as large as a hen. Its plumage is entirely white, except a yellow tinge on the under side of the wings, and of the lateral quills of the tail; the bill and feet are black. Its noble crest is very remarkable, consisting of ten or twelve feathers, not of the soft downy kind, but of the nature of quills, tall and broad webbed; they are inserted in two parallel lines running back from the face, and form a double fan.

* CHARACTER SPECIFICUS.

PSITTACUS CRISTATUS. P. albus, crista plicatili flava.

—*Lath. Ind. Orn.* i. p. 108. No. 77.

PSITT. CRISTATUS.—*Gmel. Syst.* i. p. 331.

CACATUA.—*Bris.* iv. p. 204. 8. t. 21.

PSITT. ALBUS CRISTATUS.—*Naï Syn.* p. 30. 1.—*Will*
p. 75. t. 15.—*Id. (Angl.)* p. 112. § 1.

LE KAKATOES des MOLOUQUES.—*Pl. Enl.* 263.

—— à HUPPE' BLANCHE.—*Buff. par Sonn.* lxiii
p. 64. pl. 246. f. 2.

GREAT WHITE COCKATOO.—*Lath. Syn.* i. p. 256. 61.

HABITAT

in insulis Moluccis.—18 pollices longus.

W.



THE GREAT WHITE COCKATOO.

THE YELLOW - CRESTED COCKATOO *.

Second Species.

OF this species, there are two branches, differing in size. In both the plumage is white, with a yellow cast under the wings and the tail, and spots of the same colour round the eyes; the crest is yellow-citron, consisting of long, soft, ragged feathers, which the bird elevates and projects; the bill and feet are black.

* CHARACTER SPECIFICUS.

PSITTACUS SULPHUREUS. P. albus, crista plicatili acuminata et macula infra oculos sulphureis.—*Lath. Ind. Orn.* i. p. 100. No. 81.

PSITT. SULPHUREUS.—*Gmel. Syst.* i. p. 330.

CACATUA LUTEO-CRISTATA.—*Briss.* iv. p. 206. 9.

AVIS KAKATOEHA ORIENTALIS, &c.—*Seb.* i. p. 94. t. 59. f. 1.

LE KAKATOES à HUPPE JAUNE.—*Buff. Pl. Enl.* 14.—*Buff. par Sonn.* lxiii. p. 66.

CRESTED PARROT, or COCKATOO.—*Alb.* iii. t. 12.

LESSER WHITE COCKATOO.—*Edw.* t. 317.—*Lath. Syn.* i. p. 258. 64.

HABITAT

in insulis Moluccis.—14½ pollices longa.

W.

It was a cockatoo of this species, and probably the first ever seen in Italy, that Aldrovandus describes; and he admires its elegance and beauty. It is as intelligent, gentle, and docile, as the preceding.

We saw this beautiful Cockatoo alive. It expresses joy by shaking its head briskly several times upwards and downwards, making a slight cracking with its bill, and displaying its elegant crest. It returns the caresses; touches the face with its tongue, and seems to lick it; the kisses are soft and gentle. When the one hand is laid flat under its body, and the other rests on its back, or only touches its bill, it presses firmly, claps its wings, and with its bill half open it blows and pants, and seems to feel the most intoxicating delight. It repeats this as often as one chooses. It is also very fond of being scratched; holds its head, and raises its wing to be stroked: it often whets its bill, by gnawing and breaking bits of wood. It cannot bear the confinement of the cage, but it never roves out of its master's sight. It answers its call, and retires when he commands; in which case it discovers anxiety, often looking back for the sign of invitation. It is exceedingly neat; all its motions are graceful, delicate, and pretty. It feeds on fruits, pulse, all the farinaceous grains, on pastry, eggs, milk, and whatever is sweet, but not too sugary.

THE RED-CRESTED COCKATOO*.

Third Species.

It is one of the largest of the genus, being nearly a foot and half long; the upper part of its crest, which reclines backwards, consists of white feathers, and covers a bundle of red ones.

* CHARACTER SPECIFICUS.

PSITTACUS ROSACEUS. P. rosaceo-albus, crista plicatili, subtus rubra, rectricibus lateralibus intus a basi ad medium usque sulphureis.—*Lath. Ind. Orn.* i. p. 108. No. 78.

PSITT. MOLUCCENSIS.—*Gmel. Syst.* i. p. 331.

CACATUA RUBRO-CRISTATA.—*Bris.* iv. p. 209. 10.

LE KAKATOES à 'HUPPE' ROUGE.—*Buff. Pl. Enl.* 498.—*Buff. par Sonn.* lxxi. p. 70.

GREATER COCKATOO.—*Edw.* t. 160.—*Borowsk. Nat.* ii. p. 90. t. 5. B.

GREAT RED-CRESTED COCKATOO.—*Lath. Syn.* i. p. 257. 62.

HABITAT

in insulis Moluccis et in Sumatra.—17½ pollices longa. W.

THE LITTLE FLESH-BILLED COCKATOO*.

Fourth Species.

THE plumage is entirely white, except some tints of pale-red on the temples, and on the feathers of the upper part of the crest, which red cast is deeper on the coverts of the lower surface of the tail. There is a little light-yellow at the origin of the scapular feathers and of those of the crest, and on the inside of the quills of the wing and of most of those of the tail; the feet are blackish; the bill reddish-

* CHARACTER SPECIFICUS.

PSITTACUS PHILIPPINARUM. P. albus, crista sulphurea plicatili apice alba, orbitis flavicante-rubris, tectricibus caudæ inferioribus rubris albo punctatis.—*Lath. Ind. Orn.* i. p. 108. No. 79.

PSITT. PHILIPPINARUM.—*Gmel. Syst.* i. p. 331.

CACATUA MINOR.—*Bris.* iv. p. 212. 11. t. 22. f. 1.

LE PETIT KAKATOES des PHILIPPINES.—*Pl. Enl.* 191.

————— à BEC COULEUR DE CHAIR.—*Buff.* par *Sonn.* lxiii. p. 71.

RED-VENTED COCKATOO.—*Brown Ill.* p. 10. t. 5.—*Lath. Syn.* i. p. 258. 63.

HABITAT

in insulis Philippensibus.—13½ pollices longus.

W.

brown, which is peculiar to this species, the bills of the other cockatoos being all black. It is also the least of the genus; Brisson makes it of the size of the Guinea parrot, but it is much smaller. It has a crest, which lies flat, and is erected at pleasure.

We may observe that the bird termed by Brisson the *Cockatoo with red wings and tail* does not appear to belong to the same genus, since he makes no mention of the crest, which is the distinguishing character. Besides, he borrows his account from Aldrovandus, who describes it in the following terms. "This parrot ought to be reckoned among the largest; it is equal in size to the capon; all its plumage is cinereous-white; its bill is black and much incurvated; the lower part of the back, the rump, all the tail, and the quills of the wings, are vermilion." These characters would correspond to those of the cockatoos, if the crest were added; and this great red-and-white parrot of Aldrovandus might perhaps form a fifth species, or a variety of one of the preceding.

THE BLACK COCKATOO *.

Fifth Species.

EDWARDS, who describes this cockatoo, asserts that it is as large as a maccaw. Its plumage is entirely blueish-black, which is deeper on the back and the wings than under the body; the crest is brown or blackish, and the bird has, like the other cockatoos, the power of erecting it high, and of reclining it almost close on the head; the cheeks below the eye are covered by a red, naked, wrinkled skin, which covers the inferior mandible of the bill, whose colour, as well as that of the feet, is blackish-brown; the eye is fine black. The bird may be reckoned the negro of the cock-

* CHARACTER SPECIFICUS.

PSITTACUS GIGAS. P. brachyniger, crista occipitis dilutius elongata, genis rubris nudis.—*Lath. Ind. Orn. i. p. 107. No. 75.*

PSITT. ATERRIMUS.—*Gmel. Syst. i. p. 330.*

LE KAKATOES NOIR.—*Buff. par Sonn. lxiii. p. 74.*

BLACK COCKATOO.—*Lath. Syn. i. p. 260. 66.*

HABITAT

in Zeylona.

W.

atoos, which are generally white; the tail is long, and consists of tapered feathers. The figure delineated from nature was sent from Ceylon to Edwards, and that naturalist recognised the same bird in a collection published by *Vander Meulen* at Amsterdam, in 1707, and termed by *Peter Schenk* the *Indian Crow*.

THE PARROTS

PROPERLY SO CALLED.

WE shall apply the name of Parrot to those of the old continent whose tail is short, and consists of quills nearly equal in length. We may reckon eight species, all natives of Africa or India, and none of them found in America.

THE JACO, or CINEREOUS PARROT*.

First Species.

THIS species is now the most commonly brought into Europe, and generally preferred, as well on account of the mildness of its disposition, as of its sagacity and docility, in which it at least equals the green parrot, without the disagreeable cries. It seems to pronounce the word *Jaco*, and hence its usual appellation. All the body is of a fine pearl and slaty-grey, which is deeper on the upper surface, lighter on the lower, and inclined to

* CHARACTER SPECIFICUS.

PSITTACUS ERITHACUS. P. canus, temporibus nudis albis, cauda coccinea.—*Lath. Ind. Orn.* i. p. 109. No. 83.

PSITT. ERITHACUS.—*Gmel. Syst.* i. p. 332.

—— CINEREUS, seu SUBCÆRULEUS.—*Raii Syn.* p. 31. 7.

—*Will.* p. 76.—*Sloan. Jam.* p. 297. 10.

PSITT. GUINEENSIS CINEREUS.—*Bris.* iv. p. 310. 49.

LE PERROQUET CENDRE', ou JACO.—*Buff. Pl. Enl.* 311.

—*Buff. par Sonn.* lxiii. p. 85. pl. 246. f. 1.

ASH-COLOURED PARROT.—*Will. (Angl.)* p. 114. 7.—*Lath. Syn.* i. p. 261. 68.

HABITAT

in Africa occidentali.—20 pollices longus.

W.

white on the belly. The tail, which is vermilion, terminates and heightens this plumage, which is glossed and powdered with a snowy colour, that gives it constantly a fresh appearance. The eye is placed in a white, naked, mealy skin, that covers the cheek; the bill is black; the feet grey; and the iris gold-colour. The total length of the bird is a foot.

Most of these parrots are imported from the coast of Guinea*, and come from the interior parts of Africa†: they are also found at

* Willughby.

† “They are found on the whole of this coast (of Guinea), but in small numbers, and most of them even come from the interior parts of the country. Those of Benin, of Calbari, of Cabolopez, are most esteemed, for which reason they are brought from those places; but they are much older than such as can be obtained here, and consequently are not so docile, nor so easily trained. All the parrots here on the coast, and also near the angle of Guinea, and in the above-mentioned places, are of a blue colour. . . . These birds are so common in Holland, that they are less esteemed there than here, and not sold so dear.”—*Voyage en Guinée*, par Bosman, *Utrecht*, 1705. Albin is mistaken when he says that this species comes from the East Indies; it appears confined to Africa, and *à fortiori* it occurs not in America, though Brisson places it at Jamaica, probably from the indication of Browne and Sloane; but without having consulted them, since Sloane (Jamaica, vol. ii. p. 297) says expressly that the parrots, which are numerous in Jamaica, were all brought thither from Guinea. This species is not a native of any part of the new world. “Among the multitude of parrots found at Para, we cannot perceive the grey species, which is so common in Guinea.”—*Voyage de la Condamine*, p. 173. In Antarctic France there is no grey kind found, as in Guinea and in

Congo*, and on the coast of Angola †. They are very easily taught to speak ‡, and seem fondest of imitating the voice of children, who are also the most successful in training them. It has indeed been remarked by the older writers § that the birds most susceptible of imitating the human voice are eager to listen to children, whose articulation is imperfect and unequal, and therefore more correspondent to their own. But the Cinereous Parrot copies also the deep tones of the adult; though the effort is laborious, and the words are less distinct. One of those Guinea parrots was so completely drilled by an old sailor, that it acquired exactly his hoarse voice and cough; and though it was afterwards given to a young person, and was in no other company, it never forgot the les-

upper Africa.—*Thevet, Singularités de la France Antarctique. Paris, 1558, p. 92.*

* Recueil des Voyages qui ont servir à l'établissement de la Compagnie des Indes.—*Amsterdam, 1702, t. iv. p. 321.*

† Histoire Générale des Voyages, t. v. p. 76

‡ They inhabit likewise the isles of France and Bourbon, whither they have been transported.—*Lettres Edifiantes, Recueil, 18, p. 11.* † This isle (of Mauritius or France) breeds tortoises, turtles, grey parrots, and other game, which are caught by the hand in the woods. Besides the profit derived from this exercise, it affords much diversion. Sometimes when a great parrot is taken, it is made to scream, and instantly hundreds flock round it, which are felled with sticks.—*Recueil des Voyages qui ont servir à l'établissement de la Compagnie des Indes. Amsterdam, 1702, t. iii. p. 196.*

§ Albertus, lib. xxiii.

sons of its first master, and it was diverting to observe its transitions from a soft gracious tone to its former hoarseness and coarse sea tones.

But not only has this bird a facility, it has also an eagerness, in imitating the human voice. It listens with attention, and strives to repeat; it dwells constantly on some syllables which it has heard, and seeks to surpass every voice by the loudness of its own. We are often surprised at its repeating words or sounds, which we never taught it, and which we should not suppose it to have noticed*. It seems to set itself tasks, and tries every day to retain its lesson†. This engages its attention even in sleep, and, according to Marcegrave, it prattles in its dreams‡. They are most capable of improvement when young; then they show more sagacity, more docility: and their memory, if

* Witness that parrot of Henry VIII. which, as Aldrovandus relates, having fallen into the Thames, called to the boatman for assistance, as it had heard the passengers call from the beach.

† Cardan goes so far as to ascribe to it meditation and inward reflection on what it has been taught, and this, says he, through emulation and the love of glory . . . *Meditatur ob studium gloriæ* . . . The love of the marvellous must have had mighty influence upon this philosopher, to make him advance such absurdities.

‡ Aristotle had proposed a quære, whether animals hatched from eggs ever dream (lib. v. 10. *Hist. Anim.*) Marcegrave answers, that "his parrot Laura often rose in the night, and prattled half asleep."

early cultivated, becomes sometimes astonishing. Rhodiginus* mentions a parrot which a Cardinal purchased for 100 crowns, because it *recited correctly the Apostles' Creed*†. But when it grows older, it becomes stubborn, and will hardly be taught. Olinia recommends the evening after their meal, as the proper time to instruct them; for their wants being satisfied, they are most docile and attentive.

The education of the parrot has been compared to that of the child‡. At Rome, the person who trained the parrot held in his hand a small rod, with which he struck it on the head. Pliny says that its skull is very hard, and that it requires smart blows to make it feel§. However, the bird which we mentioned feared the rod more than a child that has been often whipped. If after remaining perched the whole day, it anticipated the hour of walking out into the garden, and descended too soon (which seldom happened), threats and the sight of the rod drove it with precipitation to its roost; there it continued, but showed its impatience by flapping its wings and screaming.

“We should suppose that the parrot does not perceive when he speaks himself, but fancies that some person addresses him. He often

* Lib. iii. 32.

† M. de la Borde tells us that he saw one, which served as almoner on board a vessel; it recited the sailors' prayer, then the rosary.

‡ Ælian.

§ Pliny, lib. x. 42.

asked his paw, and answered by holding up the paw. Though he liked to hear the voice of children, he seemed to have an antipathy to them; he pursued and bit them till he drew blood. He had also his objects of attachment, and though his choice was not very nice, it was constant. He was excessively fond of the cook-maid, followed her everywhere, sought for her, and seldom missed finding her. If she had been some time out of his sight, the bird climbed with his bill and claws to her shoulders, lavished his caresses, and would, on no account, leave her. His fondness had all the marks of close and warm friendship. 'The girl happened to have a very sore finger, which was tedious in healing, and so painful as to make her scream. While she uttered her moans, the parrot never left her chamber. The first thing he did every day was to pay her a visit; and this tender condolence lasted the whole time of the cure, when he again returned to his former calm settled attachment. Yet this strong predilection for the girl seems to have been more directed to her office in the kitchen, than her person; for when another cook-maid succeeded to her, the parrot showed the same degree of fondness the very first day*."

But parrots of this kind not only imitate discourse; they also mimic gestures and actions. Scaliger saw one that performed the dance of

* Note communicated by Madame Nadault, my sister, to whom this parrot belonged.

the Savoyards, at the same time repeating their song. The one already mentioned liked to hear a person sing, and, when he saw him dance, he also tried to caper, but, with the worst grace imaginable, holding in his toes, and tumbling back clumsily. He was then the most cheerful; but he had also an extravagant joy, and an incessant prattling when in the state of intoxication: for all parrots love wine, particularly the Spanish and the muscadine. Even in the time of Pliny it was remarked that the fumes of that liquor gave the parrots a flow of spirits*. He crept near the fire in winter, and his greatest pleasure, in that season, was to get on the chimney; and when warmed he gave many signs of his comfortable feelings. He had equal pleasure in the summer showers; he continued whole hours exposed, and spread his wings the better to receive the rain, and did not seek for cover till he was wet to the skin. After he had returned to his roost, he stripped all the feathers one after another through his bill. If the weather was dry, he liked to bathe in a cistern of water, and entered into it repeatedly, though always very careful not to wet his head. But he was as averse to plunge in winter; and if then shown a vessel full of water, he would run off and even scream.

Sometimes he was observed to yawn, and this was almost always the symptom of weariness.

* In vino præcipue lasciva. Lib. x. 42.

ness. He whistled with more force and clearness than a man; but, though he expressed many tones, he could never be taught to copy an air. He imitated perfectly the cries of wild and domestic animals, particularly the crow, which he mimicked so well, that he might have been taken for one. He seldom prattled in a room with company; but if alone in the adjacent room, he was noisy in proportion to the loudness of the conversation which he overheard; he seemed prompted to repeat precipitately all that he had learnt, and was never so animated or so clamorous. In the evening he retired of his own accord to his cage, which he shunned during the day: there with one foot concealed in the plumage, or hooked to the bars of the cage, and his head beneath his wings, he slept until he perceived the dawn of the morning; but he often wakened to the blaze of candles. Then he stepped down to the bottom of the cage and sharpened his claws, using the same motion with the scratching of a hen. Sometimes he whistled or prattled in the night when exposed to light; but in the dark he was silent and tranquil *.

That sort of society which the parrot forms with man, is, by means of language, more intimate and pleasing than what the monkey can claim from its antic imitation of our gestures and actions. If the useful and amiable qualities

* Rest of the note communicated by Madame Nadault.

Of the dog, the horse, or the elephant, command our attention and esteem, the singular talents of this prattling bird sometimes engage more powerfully our curiosity. It diverts and amuses; in solitude it is company; it takes part in conversation, it laughs, it breathes tender expressions, or mimics grave discourse; and its words uttered indiscriminately please by their incongruity, and sometimes excite surprise by their aptness*. This play of language without meaning is uncommonly whimsical, and though not more empty than much other talk, it is always more amusing. The parrot seems also to receive a tincture of our inclinations and manners; it loves, or it hates; it has particular attachments, predilections, and caprices; it is the object of its own admiration and applause; it becomes joyous or sad; it is melted by caresses, and bills tenderly in return. In a house of mourning it learns to moan†,

* Willughby speaks from Clusius of a parrot, which, when a person said to it, *Laugh, Poll, laugh*, laughed accordingly, and the instant after screamed out, *What a fool to make me laugh!* We have seen another which grew old with its master, and shared with him the infirmities of age. Being accustomed to hear scarcely any thing but the words *I am sick* (*Je suis malade*); when a person asked it, *How d'ye, Poll, how d'ye* (*Qu'as-tu perroquet, qu'as-tu?*) *I am sick*, it replied with a doleful tone, stretching itself over the fire, *I am sick* (*Je suis malade*).

† See, in the Annals of Constantine Manasses, the story of the young Prince Leo, son of the Emperor Basil, condemned to death by his implacable father, whom the cries of

and often accustomed to repeat the dear name of a mistress whose loss is bewailed, it awakens, in feeling hearts, the memory of past joys*.

The power of imitating exactly articulate discourse implies in the parrot a peculiar and more perfect structure of organ; and the accuracy of its memory, though independent of the understanding, manifests a closeness of attention and a strength of mechanical recollection that no bird possesses in so high a degree. Accordingly, all the naturalists have remarked the singular form of its bill, its tongue, and its head: its bill, round on the outside and hollow within, has, in some measure, the capacity of a mouth, and allows the tongue to play freely; and the sound, striking against the circular border of the lower mandible, is there modified as on a row of teeth, while the concavity of the upper mandible reflects it like the palate: and hence it does not utter a whistling, but a full articulation. The tongue, which modulates all the sounds, is proportionally larger than in man, and would be more voluble, were it not harder than flesh, and invested with a strong horny membrane.

But this organization, though adjusted with

the persons around him could not move, till the accents of the bird, which had learnt to deplore the fate of the prince, at last stung his barbarous heart.

* See, in Aldrovandus (p. 662), a pleasing and affecting piece, which a poet, who grieves for his mistress, addresses to his parrot, that incessantly repeats her name.

skill, is still inferior to the structure contrived to give an easy and powerful motion to the upper mandible, and, at the same time, not to hinder its opening. The muscles are not fixed to the root, where they would have exerted no force; nor to the sides, where they would have closed the aperture. Nature has adopted a different plan; at the bottom of the bill are fixed two bones, which, extending on both sides, and under the cheeks, form a continuation of it, similar in form to the *pterygoid* bones in man, except that their hinder extremity is not concreted into another bone, but loose. Thick layers of muscles, sent off from the back of the head, and inserted in these bones, move them and the bill. For a fuller description of this singular contrivance, I shall refer to Aldrovandus *.

This naturalist properly observes, that, between the eye and the lower jaw, there is a space, which deserves better the name of cheek than in any other bird; it is also more protuberant, occasioned by the number of muscles that extend over it to the bill,

The bill is very strong; the parrot easily cracks the nuts of the red fruits; it gnaws the wood, and even bends or wrenches the bars of its cage, if they be slender, or if it be tired of confinement. It uses its bill, oftener than its claws, in climbing and suspending itself; it also

* Tom. i. pp. 640 and 641.

holds by the bill in descending, as if it were a third foot, which steadies its motion; it also serves to break its fall *. It is a second organ of touch, and is equally useful with its toes, in scrambling and clenching.

The mobility of its upper mandible gives it a power which no other birds have, of chewing its food. In those, whether of the granivorous or carnivorous tribes, the bill is like a hand which throws the food into the gizzard, or an arm which splits or tears it. The parrot seizes the piece sideways, and gnaws deliberately †. The lower mandible has little motion, but that from right to left is most perceptible; and this is often performed when the bird is not eating, which has made it be supposed to ruminate. In such cases it probably only whets the edge of this mandible, with which it cuts and bites its aliments.

The parrot discovers hardly any choice in its food: it lives in its native country on almost every sort of fruit or grain. The seeds of the

* Pliny, lib. x. 42.

† We must remark that the external hind toe is moveable, and that the bird draws it sidewise and forward, to seize and handle what is given to it; but only in this single case does it use that power, and at other times, whether it walks or perches, it constantly carries two toes before and two behind. Apuleius and Solinus speak of parrots with five toes; but this was owing to their mistaking a passage of Pliny, where that naturalist ascribes that uncommon property to a family of magpies (lib. x. 42).

bastard saffron* have been found to fatten it, though they act on man as a violent purge †. In the domestic state, it eats whatever is presented; but flesh, which it would rather prefer, is extremely hurtful to it, and occasions an unnatural longing, which prompts it to suck and gnaw its feathers, and pluck them one by one from every part that its bill can reach. This cinereous Guinea parrot is particularly subject to that disease; it tears the feathers from its body, and even from its beautiful tail, which never afterwards recovers the same bright red as at first.

Sometimes after moulting this parrot is observed to become marbled with white and rose-colour; occasioned either by some distemper, or by advanced age.

What Brisson reckons as varieties, under the names of the *Red-winged Guinea Parrot*, and the *Red-variegated Guinea Parrot*, are owing to such accidental changes of plumage. In the one figured by Edwards, the red feathers are mingled at random with the grey, as if the bird had been dressed out (*tapirod*). The cinereous parrot is like others of the genus, subject to the epilepsy and the cramp ‡; yet it is very hardy

* *Carthamus Carduncellus*.—Linn.

† The Spaniards call this seed *Seme de Papagey*, parrot seed.

‡ *Olina*.—*Ocelleria*, p. 23.

and lives to a great age*. Salerne says that he saw one at Orleans which was above sixty years old, and still cheerful and lively †.

It is uncommon for parrots to propagate in our temperate climates; but they frequently lay addle eggs. There are some instances, however, of parrots being reared in France. M. de le Pigeroniere had a cock and hen in the town of Marmande in Agenois, which hatched regularly each spring for five or six years, and the young parrots lived, and were educated by the parents. Each hatch consisted of four eggs, three of which succeeded. The birds were shut in a room with nothing but a barrel open at top and filled with sawdust; sticks were fastened both on the outside and inside, that the male might scramble upwards and downwards, and sit beside the hen. In entering the room it was necessary to have boots; for the male, fired by jealousy, bit furiously whatever he perceived to approach his female ‡.

* "I knew one at the Cape of St. Domingo, which was averred to be forty-six years old." — *Note communicated by M. de la Borde.*

† Vosmaer says that he knew a parrot which had lived in a family for a hundred years, having descended from father to son: but Olina, more credible and better informed, ascribes only twenty years for the average term of the parrot.

‡ Letter dated from *Marmande en Agenois*, 25th August, 1774.

Father Labat also mentions two parrots that had several hatches at Paris * †.

* *Nouveaux Voyages aux îles de l'Amerique.*—*Paris*, 1722. t. ii. p. 160.

† There are several examples on record, especially in the south of Europe, of parrots having layed eggs; but the following account from the *Magazin Encyclopédique*, t. 4. p. 519. is particularly deserving of notice:—

“ In the year 1786, M. Passeri, of Rome, bought at Marseilles a female parrot, of the Amazonian tribe, and some months afterwards was presented at Avignon with a male of the same kind. He put these together, but without chaining them by the leg, or affixing any other badge of slavery, and suffered them to walk about the room at their ease. They often rested on the common perch; but sometimes they retired during the night to a large iron-cage, which was never shut, and in all other places where they afterwards were, they enjoyed the fullest liberty. From the first moment they met they manifested a very striking attachment to each other; and their friendship was so remarkable, that, if they were separated only a few minutes, they exhibited the greatest agitation, sending forth piercing cries, and never becoming quiet till they were put together again. When M. Passeri first became possessed of them, they had attained their full growth, but he was unable to determine their age. The male distinctly pronounced several French words, and continued to do so; the female on the contrary made only a shrill cry, and prated a good deal without pronouncing a single word. These birds travelled with their master to different parts of Italy, making their journey separately confined in a small wooden box, called by the French a *sabot*. The female has laid eggs several times: the first was at Forti, six years ago. She laid two, in a trough near a kitchen-chimney, and continued to sit on them notwithstanding the noise of people passing and repassing, and the unforeseen circumstance which obliged M. Passeri to change his abode. The second time was at Valentano. The bird then laid two eggs in the corner

of a room, without preparing any nest. She sat on them some days, but it was thought adviseable afterwards to put them under a pigeon: notwithstanding they were covered some time, they were not hatched. She laid a third time, about the middle of May 1800. The number of eggs was the same as before; they were laid on the ground, and some days afterwards were found broken; whether in consequence of any interference of the male, or by what particular means, was not ascertained: however, in the beginning of June, the parrot laid two more eggs; but this time she deposited them in an earthen vase, half filled with cinders, which was on the ground, just within a door that concealed the bird while sitting. She sat forty days, and on the fifteenth of July an egg was hatched, but the young one died the next day. M. Passeri, wishing to prove the birth of a parrot at Rome, carried it to the hospital of San Spirito; but it was found too far advanced in putrefaction, and was therefore thrown away: it was seen, however, by several surgeons' pupils who were present. The fourth, or, to speak more correctly, the fifth time the female produced, she laid three eggs in the same vessel, or *scaldino*, filled with ashes, and standing in the door-way as the year before. The incubation continued forty days, and on the twenty-fourth of June a young bird came forth. Some days afterwards the other eggs were thrown away, as being unproductive. This infant parrot remained almost naked the first fifteen days; but afterwards the small grey quills of the wings began to show themselves, and by the twentieth of August (that is to say, at the end of about two months,) the bird was completely clothed. It was the fourteenth of July before the parrot began to open its eyes; and when it was well furnished with plumage, the mother, who had constantly slept in the nest, forsook it, and returned to the male as usual. On the twenty-fifth of August the young parrot slept out of the nest. The following fact deserves particular attention: M. Passeri, observing the growth of the young parrot, and fearing lest the *scaldino* should be too small to hold the mother and her young one, took a basket lined with feathers, &c. and put it in the place

of the scaldino, behind the door. The mother went and seated herself in it immediately, and appeared to be very well satisfied with the new habitation ; but some hours after she began to cut away one side of the basket with her bill, and in three days accomplished her job, having made an opening of four or five inches in the lower part, and six or seven in the upper. The osier was cut as neatly as if the sharpest knife had been employed. There can be no doubt that the mother's object was to facilitate the departure of the young bird from the basket, when he had acquired the requisite strength in his legs. When this account was written the young bird was growing very fast, and it was supposed he would exceed his parents in size." W.

THE GREEN PARROT*.

Second Species.

EDWARDS describes this bird as brought from China. But it is not found in most of the provinces of that vast empire; it is confined to the most southern, such as Quantou and Quang-si †, which are near the tropic, the usual limit

* CHARACTER SPECIFICUS.

PSITTACUS SINENSIS. *P. viridis*, lateribus tectricibusque alarum inferioribus rubris, alis margine cæruleis, rectricibus apice fusco-flavicantibus.—*Lath. Ind. Orn.* i. p. 117. No. 107.

PSITT. SINENSIS.—*Briss.* iv. p. 291. 39.—*Gmel. Syst.* i. p. 337.

LE GRAND PERROQUET VERT de la NOUVELLE GUINÉE.—*Son. Voy.* p. 174. t. 108.

LE PERROQUET VERT de la CHINE.—*Buff. Pl. Enl.* 514.—*Buff. par Sonn.* lxiii. p. 107.

GREEN-AND-RED CHINESE PARROT.—*Edw.* t. 231.—*Lath. Syn.* i. p. 278. 85.

HABITAT

in Sina australi, Amboina, nova Guinea.

W.

† “The southern provinces, such as Quantou, and especially Quangsi, have parrots of all kinds, which differ in nothing from those of America: their plumage is the same, and they have no less facility in learning to speak.”—*Histoire Générale des Voyages*, t. vi. p. 488.

of the climate of parrots. This is probably one of those which travellers have fancied were the same both in China and in America. But that notion, which is contrary to the general order of nature, is overturned by comparing each species in detail. The present is unlike any of the parrots of the new world : it is as large as a middle-sized hen ; the whole of its body is bright shining green ; the great quills of the wing and the shoulders are blue ; the flanks, and the under side of the top of the wing, brilliant red ; the quills of the wings and tail are lined with brown.—Edwards says that it is very rare. It is found in the Moluccas, and in New Guinea, whence it was sent to us.

THE VARIEGATED PARROT*.

Third Species.

It is of the size of a pigeon. The feathers round the neck, which it bristles when angry, but which Clusius overdoes in his figure, are purple, edged with blue. The head is covered with feathers mixed with streaks of brown and white, as in the plumage of the hawk, and hence Edwards applies the epithet of *Hawk-headed*. There is some blue on the great quills of the wing, and at the point of the lateral ones of the tail, of which the two middle ones are

* CHARACTER SPECIFICUS.

PSITTACUS ACCIPITRINUS. P. viridis, capite griseo, collæ pectoræque subviolaceo vario, remigibus rectricibusque apice caruleis.—*Lath. Ind. Orn.* i. p. 111. No. 89.

PSITT. ACCIPITRINUS.—*Gmel. Syst.* i. p. 345.

—— VARIUS INDICUS.—*Bris. iv.* p. 306. 43.

—— ELEGANS CLUSII.—*Raii Syn.* p. 33. 11.

LE PERROQUET VARIE'.—*Buff. par Sonn.* lxiii. p. 110.

HAWK-HEADED PARROT.—*Edw. t. i.* 65.—*Lath. Syn.* i. p. 266. 74.

HABITAT

in India.—12½ pollices longus.

W.

green, and so are the feathers on the upper side of the body.

The mailed parrot, *No. 526, Pl. Enl.* appears to be the same with the one just described; and we presume that the small number of these birds which have been brought from America to France, were introduced from India into the new world, and that if they are found in the interior parts of Guiana, they have been naturalised there like the canaries, finches, the Guinea-pig, and some other animals, that were carried thither by navigators from the old continent. That this species is not a native of America seems evinced, because no traveller mentions it. Besides, its voice, which is shrill and acute, is different from that of all the other parrots indigenous in that continent; and we may therefore conclude that it originated from a few individuals carried accidentally from

THE VAZA, or BLACK PARROT* |.

Fourth Species.

VAZA is the name which this species bears in Madagascar, according to Flaccourt, who adds that it imitates the human voice. Rennefort also mentions it†; and it is the same with what Francis Cauche calls *Woyres-meinte*‡; which, in the Madagascar dialect, signifies the

* CHARACTER SPECIFICUS.

PSITTACUS NIGER. P. corpore cærulescente nigro, rostro orbitisque albidis.—*Lath. Ind. Orn.* i. p. 111. No. 86.

PSITT. NIGER.—*Gmel. Syst.* i. p. 386.

——— MADAGASCAR. NIGER.—*Bris. Iv.* p. 317, 53.

LE VAS, or PERROQUET NOIR.—*Buff. Pl. Éol.* 500.—

Buff. par Sonn. lxiii. p. 113. pl. 247. f. 1

BLACK PARROT of MADAGASCAR.—*Edw. t.* 5.—*Lath. Syn.* ii. p. 264. 71.

HABITAT

Madagascar.—12½ pouces longus.

† *Parrot* is the Black Parrot of this country; some of the young are brown-red, but they are difficult to be had.—*Voyage au Madagascar*, par Flaccourt. Paris, 1661.

‡ “At Madagascar the large parrots are black.”—*Relation de Rennefort, Hist. Gén. des Voy.* t. viii. p. 606.

§ *Voyage au Madagascar*, par Fr. Cauche. Paris, 1651.



• THE BLACK PARROT.

black-bird. Aldrovandus likewise takes notice of Black Parrots that inhabit Ethiopia*. The Vaza is as large as the cinereous Guinea-parrot, and is uniformly black over its whole plumage; the colour is not indeed intense, but inclined to brown, and tinged faintly with violet. It has a remarkably small bill; its tail is, on the contrary, of considerable length. Edwards, who saw it alive, says that is a very familiar and lovely bird.

Tom. i. p. 636.

THE MASCARINE*.

Fifth Species.

THIS parrot is so called, because, round its bill, there is a kind of black mask which envelopes the forehead, the throat, and the border of the face. Its bill is red; a grey hood covers the back of the head and neck; all the body is brown; the quills of the tail, which are brown two-thirds of their length, are white at their origin. The total length of this parrot is thirteen inches. The Viscount Querhoënt assures us, that it is found in the island of Bourbon, whither it has probably been carried, from Madagascar. We have one in the king's cabinet

* CHARACTER SPECIFICUS.

PSITTACUS MASCARINUS. P. fuscus, facie nigra, cauda albente.—*Lath. Ind. Orn.* i. p. 111. No. 87.

PSITT. MASCARINUS.—*Gmel. Syst.* i. p. 333.—*Bris.* iv. p. 315. 52.

LE MASCARIN.—*Buff. Pl. Enl.* 35.—*Buff. par Sonn.* lxiii. p. 115. pl. 247. f. 1.

MASCARINE PARROT.—*Lath. Syn.* i. p. 265. 72.

HABITAT

in Mascarina.— $13\frac{1}{2}$ pollices longus.



THE MASCARINE PARROT.

of the same size and colour, except that it has not the black mask, nor the white colour on the tail, and that all its body is equally brown; its bill is also smaller, and, in that respect, it resembles the vaza, of which it would appear to be a variety, if it does not form an intermediate species between that bird and the Mascarine. To the same species we would refer the *brown parrot* of Brisson.

THE BLOODY-BILLED PARROT

Sixth Species.

THIS parrot is found in New Guinea. It is remarkably large. Its bill is blood-coloured, thicker and broader in proportion than that of any of the other parrots, and even than that of the American maccaws. The head and neck are of a brilliant green, with gold reflections; the fore part of the body is yellow shaded with green; the tail is yellow below and green above; the back is sky-blue; the wing appears

* CHARACTER SPECIFICUS.

PSITTACUS MACRORYNCHOS. P. viridis, corpore antice flavo-virescente, dorso cæruleo-viridi, tectricibus alarum nigris flavo-aureo marginatis.—*Lath. Ind. Orn.* i. p. 117. No. 108.

PSITT. MACRORHYNCHOS.—*Gmel. Syst.* i. p. 338.

LE PERROQUET de la NOUVELLE GUINÉE.—*Pl. Enl.* 713.

———— à BEC COULEUR DE SANG.—*Buff. par Sonn.* lxiii. p. 117.

GREAT-BILLED PARROT.—*Lath. Syn.* i. p. 278. 86.

HABITAT

in Nova Guinea.—14 pollices longus.

W.

tinged with a mixture of the same sky-blue and green, according to its different positions; the coverts are black, edged and sprinkled with streaks of gold-yellow. This parrot is fourteen inches long.

THE GREAT BLUE-HEADED GREEN PARROT*.

Seventh Species.

THIS is one of the largest of the parrots; it is nearly sixteen inches in length, though its tail is rather short. The face and the upper-side of the head are blue; all the upper surface is meadow-green, mixed with blue on the great quills; all the under surface is olive-green: the tail is green above, and dirty-yellow below.

* CHARACTER SPECIFICUS.

PSITTACUS GRAMINEUS. P. viridis, subtus olivaceus, pileo cæruleo, cauda subtus obscure flava.—*Lath. Ind. Orn.* i. p. 118. No. 110.

PSITT. GRAMINEUS.—*Gmel. Syst.* i. p. 338.

LE PERROQUET d'AMBOINE.—*Pl. Enl.* 862.

LE GRAND PERROQUET VERT à TÊTE BLEUE.—*Buff. par Sonn.* lxiii. p. 119.

AMBOINA PARROT.—*Lath. Syn.* i. p. 279. 87.

HABITAT

in Amboina.—16 pollices longus.

W.

THE GREY-HEADED PARROT*.

Eighth Species.

THIS bird has a short tail, which excludes it from the family of the parrakeets; and though only seven inches and a half long, it is thick and round-shaped. Its head and face are of a glossy-blueish grey; its stomach and all the under side of its body are of a full marigold-yellow, sometimes mixed with aurora-red; its breast and all its upper surface green, except the quills of the wings, which are only edged with that colour on a brown-grey ground.

These parrots are frequent in Senegal: they

* CHARACTER SPECIFICUS.

PSITTACUS SENEGALUS. P. viridis, subtus luteus, capite cinereo, orbitis nigris nudis.—*Lath. Ind. Orn.* i. p. 128. No. 138.

PSITT. SENEGALUS.—*Gmel. Syst.* i. p. 347.—*Bris.* iv. p. 400. 92. t. 24. f. 2.

LE PETITE PERRUCHE du SENEGAL.—*Pl. Enl.* 288.

LE PERROQUET à TÊTE GRISE.—*Buff. par Sonn.* lxiii. p. 120.

SENEGAL PARROT.—*Lath. Syn.* i. p. 307. 114.

HABITAT

in Senegala.—8½ pollices longus,

W.

fly in small flocks of five or six, and perch on the straggling trees in the burning sandy plains of that country, and utter a shrill disagreeable cry. They keep close together, so that a person may kill several at once; and it often happens that a single shot levels with the ground the whole of the little flock. Lé Maire affirms that they never speak *; but perhaps they have been neglected in their education.

* “The parrots are there of two kinds (at Senegal); some small and entirely green, others larger, having the head grey, the belly yellow, the wings green, and the back mixed with grey and yellow; the latter never speak, but the smaller have a sweet clear voice, and prattle whatever they are taught.”—*Voyage de la Maire. Paris, 1695, p. 107.*

THE LORIES.

THIS name has been applied in the East Indies to a family of parrots whose cry resembles the sound of the word *lori*. They are hardly distinguished from the rest of the genus, except by their plumage, which is chiefly red, and of various intensity. Their bill is also smaller, not so much hooked, but sharper than that of the other parrots.* Their aspect is lively, their voice shrill, and their motions quick. They are, according to Edwards, the most nimble of all the parrots, and the only ones that can leap to the height of a foot. These well-ascertained facts confute the assertion of a traveller, that they brood in silent melancholy* †.

They are taught with great ease to whistle and articulate words; they soon grow tame; and, what is uncommon in all animals, they retain their cheerfulness in captivity. But they are in general very delicate, and difficult to

* Hist. Gén. des Voy. t. x. p. 459.

† We purchased a great many of these birds at Amboyna (says Labillardiere), which made such a piercing noise that they did not leave us quiet for a moment during the day. They died daily on board the ship, being attacked by convulsions, which vitriolic ather speedily removed, without however saving their lives.—*Voyage*, t. i. p. 375. W.

transport ; and, in our temperate climates, they are short lived. Even in their native regions they are subject to epileptic fits, like the macaws and other parrots ; yet it is probable that this disorder attacks only the domesticated birds.

“ Ornithologists have improperly,” says Sonnerat *, “ discriminated the Lories by the epithets of the *Philippine*, the *East-Indian*, the *Chinese*, &c. These birds inhabit only the Moluccas and New Guinea, and those found in other parts have been carried thither.” But these nomenclators are guilty of a greater impropriety in reckoning some species of Lories as natives of America, since none exist there ; and, if travellers have seen a few individuals, they must have been introduced from the Asiatic islands. •

Sonnerat adds, too, that he constantly found the Lories in one island to be of a different species from those in another, though at a short distance only. A similar observation has been made in regard to the islands of the West Indies.

• Voyage à la Nouvelle Guinée, p. 173.

THE NOIRA-LORY *.

First Species.

THIS bird is found at Ternate†, at Ceram, and at Java, where it is called *Noira*, a name

* CHARACTER SPECIFICUS.

PSITTACUS GARRULUS. P. coccineus, orbitis cinereis, genibus alisque viridibus, rectricibus medietate postica cæruleis.—*Lath. Ind. Orn.* i. p. 113. No. 96.

PSITT. GARRULUS.—*Gmel. Syst.* i. p. 333.

LORIUS CERAMENSIS.—*Bris.* iv. p. 215. 13.

LE LORI de CERAM. — *Buff.* vi. p. 129. var. 2. — *Raii Syn.* p. 151. 9.

SCARLET PARRAKEETO WITH GREEN - AND - BLACK WINGS.—*Will. (Angl.)* p. 117.

CERAM^o LORY.—*Lath. Syn.* i. p. 269. 76.

HABITAT

in insulis Moluccis, Ceram.—10½ pollices longus.

β. P. coccineus, alis viridibus nigrisque, rectricibus flavis medietate postica virescentibus.

PSITT. AURORÆ.—*Gmel. Syst.* i. p. 333. 25. B.

—— COCCIN. ORIENT. alis ex VIRIDI ET NIGRO VARIIS.—*Raii Syn.* p. 31. 9.—*Will.* p. 78.

LE VARIETE' DE NOIRA.—*Buff. par Sonn.* lxiii. p. 129.

NOIRA LORY.—*Lath. Syn.* i. p. 270. 76. A.

γ. P. coccin. macula interscapulari tectricibusque alarum minoribus luteis, rectricibus lateralibus basi cæruleis.

which the Dutch have adopted. It is held in such high estimation in India, that ten reals are readily offered for one Noira. In the account of the first voyage from Holland to Java, it is said that several of these beautiful birds, which were tried to be brought home, all died on the passage*. In the second voyage, however, one was carried to Amsterdam; and, since that time, they have been more frequent.

The Noira shows strong attachment, and even affection, to its master; it caresses him with its bill, and strokes his hair with surprising gentleness and tameness. At the same time it cannot bear strangers, and bites them with a sort of rancour. The natives of Java breed

LORIUS MOLUCCENSIS.—*Bris.* iv. p. 219. 14. t. 23. f. 1.—

Gmel. Syst. i. p. 834. 25. γ.

LE LORI des MOLOQUES.—*Pl. Enl.* 216.

LE LOIRA NOIRA.—*Buff. par Sonn.* lxiii. p. 126. pl. 248. f. 1.

SCARLET LORY.—*Edw.* t. 172.—*Lath. Syn.* p. 270. 76. B.

δ. *P. tectricibus alarum plurimis cæruleo punctatis.*—*Gmel. Syst.* i. p. 334.—*Lath. Syn.* i. p. 271.

HABITAT cum præcedentibus.—*Femora absque armillis.* W.

† “There are many beautiful parrots in the isle of Ternate, which are red on the back, with little feathers on the fore side of the wings. They are somewhat smaller than those of the West Indies, but they learn much better to speak.”—*Argensola, Conquêtes des Moloques.* Paris, 1706, t. iii. p. 21.

* Linscot *apud Clusium. Auct.* p. 364.

many of these birds*. In general, the custom of keeping tame parrots seems to have been very ancient in India, since Ælian mentions it.

* "The Dutch passed into the apartment of the parrots, which appeared to them much more beautiful than what they had seen in other places, but of a moderate size. The Portuguese give them the name of *noyras*; they have a bright glossy red on the throat and under the stomach, and a beautiful gold plate on the back."—*Hist. Gén. des Voy.* t. viii. p. 136.

VARIETIES OF THE NOIRA.

I. To the Noira we ought perhaps to refer the Java Parrot mentioned by Aldrovandus, and which the inhabitants of that island term *nor*, which means brilliant. The whole of the body is of a deep red; the wings and the tail are of a deep green; there is a yellow spot on the back, and a small border of the same colour on the shoulder. Of the feathers of the wings, which when closed appear entirely green, the coverts only, and the small quills, are yellow, and the large ones are brown.

II. The lory described by Brisson under the name of the *Ceram Lory*, and to which he applies what we have ascribed to the Noira, is only a variety, and in no respect different, except that its legs are green, while those of the former are red, like the rest of the body.

THE COLLARED LORY

Second Species.

ALL the body, including the tail, is of a deep blood-colour; the wing is green, the top of the head is black, terminated with violet on the

* CHARACTER SPECIFICUS.

PSITTACUS DOMICELLA. P. ruber, pileo violaceo, alis viridibus, humeris, genisque cæruleis, orbitis fuscis.—*Lath. Ind. Orn.* i. p. 114. No. 97.

PSITT. DOMICELLA.—*Gmel. Syst.* i. p. 334.

LORIUS ORIENTALIS INDICUS.—*Bris.* iv. p. 222. 15. t. 24. f. 1.

LE LORI DES INDES À COLLIER.—*Buff.* vi. p. 130.—*Pl. Enl.* 84. (*Femina* ?)

SECOND BLACK-CAPPED LORY.—*Edw.* t. 171.

PURPLE-CAPPED LORY.—*Lath. Syn.* i. p. 271. 77.

HABITAT

in Moluccis et Nova Guinea.—11 fere pollices longus.

β. P. coccineus, vertice renigibusque primoribus cyaneis, torque colli luteo, rectricibus purpureis fusco-rubescens adumbratis.

LORIUS TORQUATUS INDICUS.—*Bris.* iv. p. 230. 18.—*Gmel. Syst.* i. p. 334.

LE LORI des INDES ORIENTALES. — *Pl. Enl.* 119. (*Mas* ?)

LE LORI à COLLIER.—*Buff. par Sonn.* lxiii. p. 131.

LAUREY from the Brasils.—*Alb.* i. t. 13.

BLUE-CAPPED LORY.—*Lath. Syn.* i. p. 271. 77.

HABITAT cum priore.

W.

nape; the legs and the fold of the wing are of a fine blue; the lower part of the neck is furnished with a yellow collar, which we have adopted as the specific character.

The bird figured in the *Planches Enluminées*, under the name of the *East-Indian Lory*, and which Brisson describes by the same appellation, appears to be the female of this; for the only difference is, that it wants the yellow collar, and that the blue spot on the top of its wing is not so broad; it is also somewhat smaller. This Lory is, like all the rest of the kind, very gentle and familiar; but it is also very delicate and difficult to breed. None more easily learns to speak, and even with distinctness. "I have seen one," says Aublet, "which repeated every thing it heard the first time*." Though this capacity is very astonishing, there is no reason to doubt of it†. This bird is valued very highly; Albin says that he saw one sold for twenty guineas.—We may regard the *East-Indian collared lory* as a variety of this species.

* "It had come from India to the Isle of France, and had been given to me by the Count d'Estaing; it was astonishing."—*Note communicated by M. Aublet.*

† "The Dutch had one that in a moment imitated the cries of the other animals which it heard."—*Second Voyage des Hollandois. Hist. Gén. des Voy. t. viii. p. 377.*—"All voyagers speak with admiration of the facility with which the parrots of the Moluccas can repeat what they hear. Their colours are variegated, and form an agreeable mixture; they scream much, and very loud."—*Ibid.*

THE TRICOLOR LORY*.

Third Species.

THE fine red, the azure, and the green, which are disposed in large spots on the plumage of this Lory, have induced us to give it the epithet of *Tricolor*. The fore-part and the sides of the neck, the flanks, the lower part of the back, the rump, and half the tail, are red. The under side of the body, the legs, and the top of the back, are blue; the wing is green, and the point of the tail, blue; the crown of the head is covered by a black cap. The bird is nearly ten inches long. Few are so beautiful,

* CHARACTER SPECIFICUS.

PSITTACUS LORY. *P. coccineus*, pileo violaceo, alis viridibus, pectore genibus caudaque cæruleis, orbitis incarnatis.—*Lath. Ind. Orn.* i. p. 115. No. 98.

PSITT. LORY.—*Gmel. Syst.* i. p. 335.

LORIUS PHILIPPENSIS.—*Bris.* iv. p. 225. 16.

LE LORI des PHILIPPINES.—*Pl. Enl.* 168.

——— TRICOLOR.—*Buff. par Sonn.* lxiii. p. 134.

FIRST BLACK-CAPPED LORY.—*Edw.* t. 170.—*Lath. Syn.* i. p. 273. 78.

HABITAT

in insula Yolo et reliquis Philippinis.—10½ poll. longus. W.

both on account of the brilliancy of the colours, and their elegant contrast. Edwards saw it alive, and terms it the *Little Lory*: it whistled pleasantly, he says, and pronounced several words distinctly; and, leaping briskly on its roost or on the finger, it called with a soft clear voice, *lory, lory*. It played with the hand, and ran after persons, hopping like a sparrow. This charming bird lived but a few months in England. The specimen which we have described was brought by Sonnerat from the island Yolo, which the Spaniards claim as one of the Philippines, and the Dutch as one of the Moluccas.

THE CRIMSON LORY

Fourth Species.

THIS lory is nearly eleven inches long. We term it *crimson*, because the red of its plumage, the face except, is not so brilliant as in the others, and has a dull brown cast on the wing. The blue of the top of the neck and of the stomach is weak, and inclined to violet; but, on the fold of the wing, it is bright and azure, and at the edge of the great quills, it is lost in their blackish ground; the tail is of a smoky red

* CHARACTER SPECIFICUS.

PSITTACUS PUNICEUS. P. coccineus, subtus violaceus, rectricibus saturate coccineis apice rubescentibus?—*Lath. Ind. Orn.* i. p. 115. No. 99.

PSITT. PUNICEUS.—*Gmel. Syst.* i. p. 335.

LORIUS AMBOINENSIS.—*Bris.* iv. p. 231. 19.

LE LORI d'AMBOINE.—*Pl. Enl.* 518.

———— CRAMOISI.—*Buff. par Sonn.* lxiii. p. 136.

BLUE-BREASTED PARROT.—*Brown Ill.* t. 6.

CRIMSON LORY.—*Lath. Syn.* i. p. 273. 79.

HABITAT

in Moluccis, Amboina.—11½ pollices longus.

W.

below, and of the same tile-red above as the back. This is not the only species seen at Amboyna, and from Gemelli Carreri the following also appears to be found there.



THE LORY

THE RED LORY*.

Fifth Species.

It is entirely red, except the tip of the wing, which is blackish, and two blue spots on the back, and one of the same colour on the under coverts of the tail. It is ten inches long, and appears to be a new species. It is improperly termed the *Chinese Lory* in the *Pl. Entom.* for voyagers never mention the lorics as found in China†; and one of our best observers, M.

* CHARACTER SPECIFICUS.

PSITTACUS RUBER. P. coccineus remigibus primoribus orbitisque nigris, macula alarum tectricibusque caudæ inferioribus carneis.—*Lath. Ind. Orn.* p. 115. N^o. 100.

PSITT. RUBER.—*Gmel.* t. 1. p. 836.

LE LORI de la CHINE.—*Pl. Ent.* 519.

——— ROUGE.—*Buff. par Sonn.* t. iii. p. 138.

——— de GILOLO.—*Son. Voy.* p. 177. t. 112.

MOLUCCA LORY.—*Lath. Orn.* t. 1. p. 274. 80.

HABITAT

in Moluccis et Nova Guinea.—10 pollices long.

† "At Ambbryna there are many species of parrots, and among others is one which has all its feathers carnation."—*Voyage autour du Monde, par Gemelli Carreri*, t. v. p. 236.

THE RED LORY.

Sonnerat, assures us, on the contrary, that they are all inhabitants of the Moluccas and of New Guinea. In fact, the *Gilolo Lory** of this author seems to be exactly the same with the present.

* Voyage à la Nouvelle Guinée, p. 177.

• THE RED-AND-VIOLET LORY*.

Sixth Species.

THIS bird has hitherto been found only at Gueby. All the body is of a shining red, regularly scaled with violet-brown from the back of the head, passing by the sides of the neck, as far as the belly; the wing is broken by red and black, in such a manner that this last colour terminates all the points of the quills, and marks a part of their webs; the small quills and their coverts nearest the body are dun-violet; the tail is copper-red. The total length of the bird eight inches.

* CHARACTER SPECIFICUS.

PSITTACUS GUEBIENSIS. P. macr. coccineus, pectore interscapuliis abdomineque purpureis, hoc saturatiore, remigibus nigris fascia rubra. — *Lath. Ind. Orn.* i. p. 90. No. 24.

PSITT. GUEBIENSIS. — *Gmel. Syst.* i. p. 318.

LE PETIT LORI de GUEBY. — *Son. Voy.* 174. t. 109. — *Pl. Enl.* 684.

LE LORI ROUGE ET VIOLET. — *Buff. par Sonn.* lxiii. p. 140.

GUEBY LORY. — *Lath. Syn.* i. p. 219. t. 21.

HABITAT

in insula Gueby. — 9½ pollices longus.

W.

THE GREAT LORY

Seventh Species.

THIS is the largest of all the lories; it is thirteen inches long. The head and neck are of a fine red; the lower part of the neck, where it joins the back, is violet-blue; the breast is richly clouded with red, blue, violet, and green, and the mixture of green and fine red is continued under the belly; the great quills, and the edge of the wing, from the shoulder, are sky-blue; the rest of the upper surface is dull red. Half of the tail is red, the tip yellow.

It appears that Vosmaer describes the same

* CHARACTER SPECIFICUS.

PSITTACUS GRANDIS. P. ruber, corpore subtus rubro cæruleo violaceo viridique variegato, remigibus cyaneis, cauda apice flavo.—*Lath. Ind. Orn.* i. p. 116. No. 102.

PSITT. GRANDIS.—*Gmel. Syst.* i. p. 335.

LE LORI de la NOUVELLE GUINE'E.—*Pl. Enl.* 683.

LE GRAND LORI.—*Buff. par Sonn.* lxiii. p. 153.

GRAND LORY.—*Lath. Syn.* i. p. 276. 81.

HABITAT

in Nova Guinea, Zeylona ?—13 pollices longus.

W.

species by the name of *Ceylon Lory*. It was probably carried from a greater distance to that island, and thence brought into Holland; but it lived there only a few months.

“

THE PARRAKEET LORIES.

THE following species are almost entirely red, like the lories, but their tail is longer, though not so long as that of the parrakeets. We shall therefore consider them as forming the intermediate gradation.

THE RED PARAKEET LORY*.

First Species.

THE plumage of this bird is almost wholly red, except some of the coverts and the tips of the quills of the wing and of the tail, which are partly green and partly blue. The total length is eight inches and a half. Edwards says that it is very rare, and that a traveller brought it from Borneo, and gave it to Sir Hans Sloane.

* CHARACTER SPECIFICUS.

PSITTACUS BORNEUS. P. macr. ruber, remigibus rectricibusque apice viridibus, alis macula caerulea, orbitis fuscis.

—*Lath. Ind. Orn.* i. p. 89. No. 21.

PSITT. BORNEUS.—*Gmel. Syst.* i. p. 318.

—— COCCINEA BONARUM FORTUNARUM INSULÆ.—

Bris. iv. p. 373. 77.

LE LORI PERRUCHÉ ROUGE.—*Buff. par Sonn.* lxxiii. p. 156.

LONG-TAILED SCARLET LORY.—*Edw.* t. 173.—*Lath. Syn.*

i. p. 216. 18.

HABITAT

in India.— $9\frac{1}{2}$ pollices longus.

W.

THE VIOLET-AND-RED PARRA- KEET LORY*.

Second Species.

THE prevailing colour is red, mixed with violet-blue. The bird is ten inches long, and its tail occupies nearly one-third of the space. The tail is entirely of a full blue, which also covers the flanks, the stomach, the top of the back, and of the head; the great quills of the wing are yellow; all the rest of the plumage is of a fine red, edged with black, which is disposed in festoons on the wings.

* CHARACTER SPECIFICUS.

PSITTACUS COCCINEUS. P. macr. coccineus, subtus fusco violaceoque varius, capite et collo superioribus, pectore et tænia pone oculos cæruleo-violaceis, remigibus rectricibusque violaceo-fuscis.—*Lath. Ind. Orn.* i. p. 89. No. 22.

PSITT. INDICA COCCINEA.—*Bris.* iv. p. 376. 78. t. 25. 2.

—— INDICUS.—*Gmel. Syst.* i. p. 318.

LE PERRUCHE des INDÉS ORIENTALES.—*Pl. Enl.* 143.

LE LORI PERRUCHE VIOLET ET ROUGE.—*Buff. par Sonn.* lxiii. p. 158. pl. 248. f. 2.

INDIAN LORY.—*Lath. Syn.* i. p. 217. 19.

HABITAT

in Amboina.—11 fere pollices longus.

THE TRICOLOR PARRAKEET LORI*.

Third Species.

RED, green, and turkey-blue, are disposed in large marks over all its plumage; red covers the head, the neck, and all the upper side of the body; the vane is deep green; the back and tail are of a full velvet-blue. The tail is seven inches long; and the whole bird is fifteen inches and a half long, and as large as a turtle. —The tail in these last three species, though

* CHARACTER SPECIFICUS.

PSITTACUS AMBOINENSIS. P. macr. coccineus, dorso cæruleo, alis macula viridi, rectricibus violaceis.—*Lath. Ind. Orn.* i. p. 86. No. 13.

PSITT. AMBOINENSIS.—*Gmel. Syst.* i. p. 316.—*Bris.* iv. p. 378. 79. t. 28. f. 2.

LE PERRUCHE ROUGE d'AMBOINE.—*Pl. Enl.* 240.

LE LORI PERRUCHE TRICOLOR.—*Buff. par Sonn.* lxiii. p. 160.

AMBOINE RED PARROT.—*Lath. Syn.* i. p. 210. 12.

HABITAT

in Amboina.—15 pollices longus.

W.

longer than common in the lorics and parakeets properly so called, is not tapered as in the long-tailed parakeets; but consists of equal quills, with a square termination.

END OF VOL. VI.

